

UNITED



NATIONS

DEPARTMENT OF ECONOMIC AFFAIRS

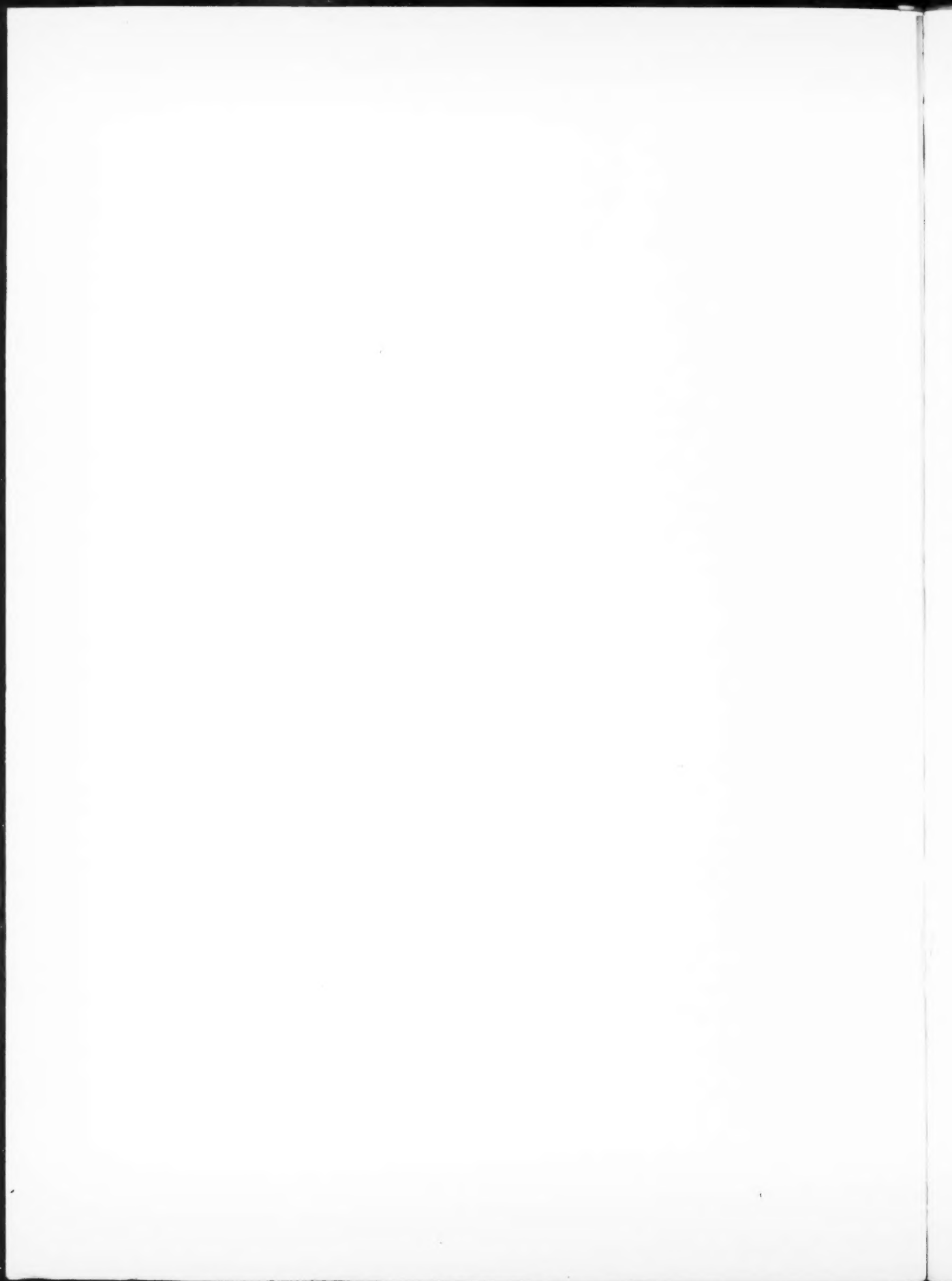
# ECONOMIC SURVEY OF EUROPE IN 1951

Also issued as Vol. 3, No. 3, of the *Economic Bulletin for Europe*

*Prepared by the*

RESEARCH AND PLANNING DIVISION  
ECONOMIC COMMISSION FOR EUROPE

GENEVA, 1952





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## PREFATORY NOTE

The *Economic Survey of Europe in 1951* is the fifth in a series of annual economic reports prepared by the Research and Planning Division of the Secretariat of the Economic Commission for Europe. These reports, together with the quarterly *Economic Bulletin for Europe*, are intended to serve the needs of the Commission and to help in the task of reporting on world economic conditions which the Economic and Social Council of the United Nations has entrusted to the Department of Economic Affairs.

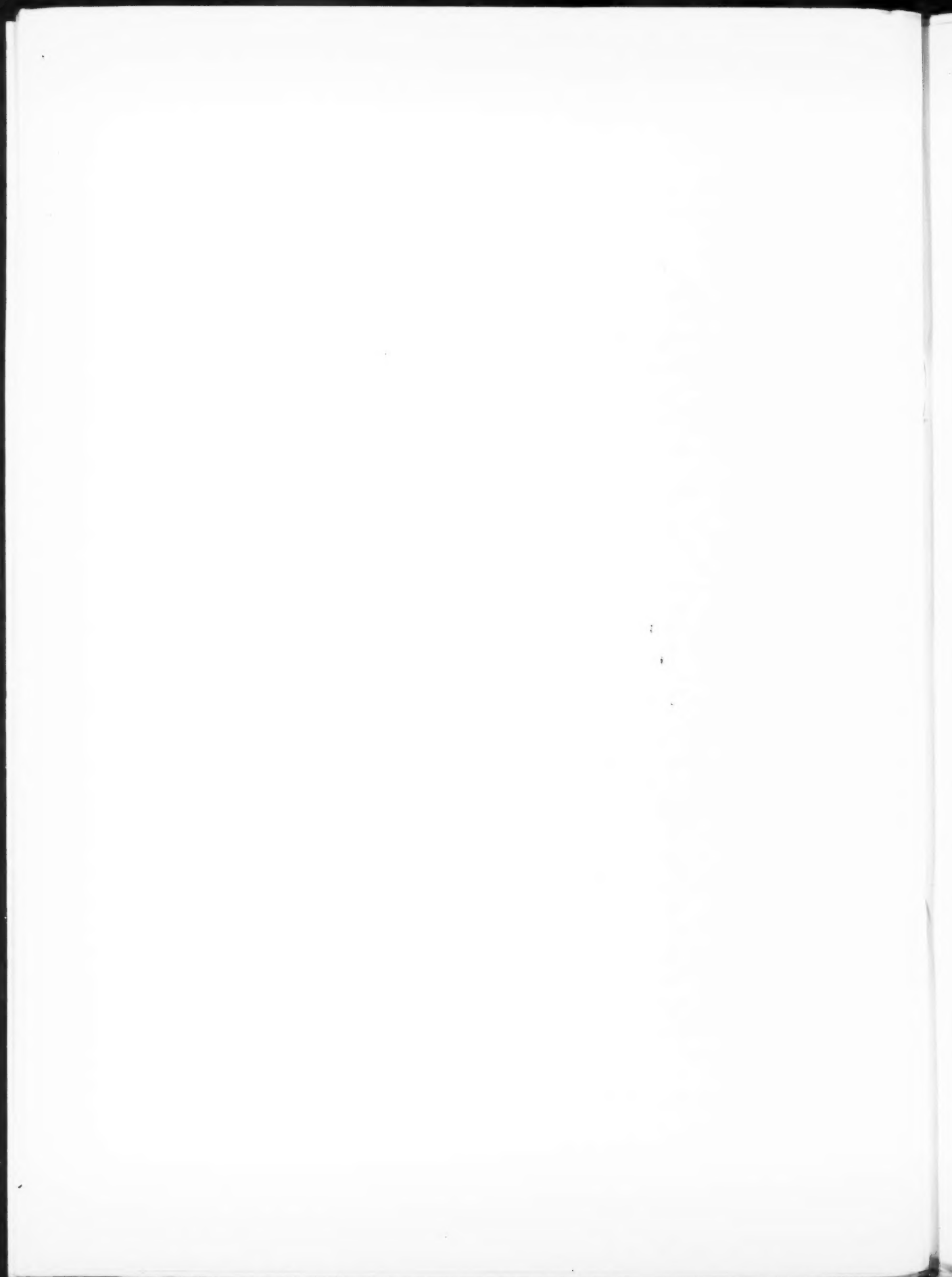
The *Survey* is published on the responsibility of the Secretariat, and the views expressed in it should not be attributed to the Commission or to its member Governments.

A provisional edition in English (not including Chapter 6) was distributed to Governments on 23 January 1952 in preparation for the meeting of the Commission at the beginning of March ; the major portions of the French and Russian translations of the provisional edition were distributed a week later and the remainder shortly afterwards. In previous years, the *Survey* was prepared and distributed several months later. It is hoped that the advance in date of publication will enhance the usefulness of the report by making it available to Governments and the public at a time when economic policies for the new year are, in most instances, still under consideration.

As far as possible, an effort has been made to take account, in the analysis, of economic developments up to the end of 1951, but most of the underlying statistics are necessarily provisional and relate to less than the full calendar year. The major statistical series are, however, regularly published in the *Economic Bulletin for Europe* and will be continued in future numbers of that publication. As a consequence of the change in time-table, the present *Survey* is also being issued as Volume 3, No. 3, of the *Bulletin*.

Geneva

February 1952



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**ECONOMIC SURVEY**  
**OF**  
**EUROPE IN 1951**

## SYMBOLS EMPLOYED

The following symbols have been used throughout this SURVEY :

- .. = not available or not pertinent
- = nil or negligible
- = revised figure

In referring to combinations of years, the use of an oblique stroke—*e.g.*, 1949/50—signifies a 12-month period (say from 1 July 1949 to 30 June 1950). The use of a hyphen—*e.g.*, 1948-1950—signifies an average of the full period of calendar years covered (including the end years indicated).

Unless the contrary is stated, the standard unit of weight used throughout is the metric ton. The definition of "billion" used throughout is one thousand millions. Minor discrepancies in totals and percentages are due to rounding.

In general, information received up to 10 January 1952 has been included in the SURVEY.

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## Chapter 1

### INTRODUCTION: THE GENERAL ECONOMIC SETTING

Even though their full consequences are yet to be felt, the extraordinary forces which had been released in the world economy by the outbreak of the Korean war appeared to subside to some extent during 1951.

The outburst of speculative demand by individuals, business enterprises, and Governments for goods thought likely to be in short supply abated in the spring of the year. There ensued in many western European countries, as in the United States, a recession in some industries, notably textiles, though the pressure on heavy industry continued to increase from the combined force of armament, investment, and export demand. Raw material shortages proved to be less of a general handicap to production in Europe or elsewhere than appeared likely at the beginning of the year. Coal and steel supplies did, however, impose limitations in parts of Europe, steel especially in the United Kingdom and both coal and steel in eastern Europe. The need to expand raw material supplies of all kinds remained urgent in the face of rising industrial demand.

Prices of a number of key commodities receded from the extreme heights reached shortly after the turn of the year and then showed some evidence of greater stability during the summer at levels considerably higher than a year earlier. But the less volatile prices of many other basic commodities maintained a more gradual rise, and the upward adjustment of living costs and wages continued.

International trade and payments, violently disrupted away from the more orderly progress under way before Korea, soared to new heights at the beginning of the year as prices and volume rose, but the initial benefits which had been registered in the dollar positions of some European countries proved short-

lived. The early optimism generally prevailing last spring was forgotten as leading currencies felt the strains of higher import costs and of competing demands for the products of export industries, and efforts to proceed with the systematic removal of trade barriers gave way to a series of disparate emergency measures of a *sauf qui peut* nature in the countries most seriously threatened.

In brief, 1951 has been a period of adjustment and the testing of higher prices by consumer resistance and by modifications in official stockpiling programmes; the testing of the abilities of national economies to stand the strain of higher production targets; the re-appraisal, still going on, of the amount of resources to be devoted to armaments and of the willingness of the public to accept cuts in actual or potential consumption levels; and the effort by Governments, realistic in some cases but manifestly inadequate in others, to evaluate their problems more clearly, to broaden the range of their weapons, and to devise a set of policies equal to the task of increasing production while holding inflation in check.

In Europe, the year brought a general uplift of the whole structure of wages and retail prices in a great number of countries, both east and west. In countries where resources were fully employed, inflation, both in the form of the cost-price spiral and also in the form of an excess of total demand over total supply (at the existing price level) continued to constitute the outstanding problem of economic policy.<sup>1</sup> Some Governments, however, seemed to accept inflation as the most feasible and immediate way of obtaining the desired transfer of resources and to show less concern for its more insidious long-run consequences.

<sup>1</sup> Chapter 4 of this SURVEY discusses the progress and problems of inflation in European countries.

#### 1. CHANGES IN WORLD TRADE AND PAYMENTS DURING 1951

##### *The Development of World Trade*

The rise in demand and the rapid increase in economic activity after Korea provided a strongly expansive environment for world trade. As may be seen in

Table 1, the total dollar value of world trade in the first nine months of 1951 was nearly half as great again as in the same period of 1950, the greater part of the increase reflecting simply the steep rise in world



prices, although the increase in volume was also substantial. It is particularly noteworthy that in countries outside Europe and the United States—that is, in countries chiefly suppliers of primary goods and importers of finished goods—the total value of exports

(including their trade with one another) was at an annual rate higher by about \$10 billion than in the first nine months of 1950, the increase in this instance being still more attributable to the rise in prices than to the rise in volume.

**Table 1**  
QUARTERLY MOVEMENTS IN THE VALUE, VOLUME AND UNIT VALUE  
OF INTERNATIONAL TRADE

*Billions of dollars (f.o.b.) and index numbers*  
*Quarters and quarterly averages*

Period		TRADE OF EIGHTEEN WESTERN EUROPEAN COUNTRIES <sup>a</sup>			UNITED STATES		REST OF WORLD <sup>b</sup>	TOTAL WORLD <sup>b c</sup>
		with one another (Imports= Exports <sup>d</sup> )	with other countries <sup>e</sup> Imports      Exports		Imports	Exports <sup>c</sup>	Exports	Exports
<i>Value (Billions of dollars)</i>								
1949	January-September . . .	2.4	3.7	2.6	1.6	3.0	5.5	13.5
1950	January-September . . .	2.4	3.0	2.2	2.0	2.3	5.7	12.6
	October-December . . .	3.2	3.4	3.0	2.6	2.6	7.5	16.4
1951	January-March . . . . .	3.2	4.0	3.0	3.0	2.9	8.2	17.3
	April-June . . . . .	3.6	4.7	3.5	2.8	3.5	8.4	19.0
	July-September . . . . .	3.6	4.6	3.5	2.5	3.3	7.6	18.0
	January-September . . .	3.5	4.4	3.3	2.8	3.2	..	..
<i>Volume (Index numbers—January- September 1950 = 100)</i>								
1949	January-September . . .	80	104	85	81	122	93	93
1950	January-September . . .	100	100	100	100	100	100	100
	October-December . . .	126	101	130	111	107	111	118
1951	January-March . . . . .	119	106	117	114	112	112	115
	April-June . . . . .	121	117	128	103	129	111	120
	July-September . . . . .	120	112	125	92	122	..	..
	January-September . . .	120	112	123	103	121	..	..
<i>Unit value (Index numbers—January- September 1950 = 100)</i>								
1949	January-September . . .	125	118	135	97	106	105	114
1950	January-September . . .	100	100	100	100	100	100	100
	October-December . . .	105	114	105	116	108	118	111
1951	January-March . . . . .	113	126	112	127	114	128	121
	April-June . . . . .	123	134	120	135	119	132	127
	July-September . . . . .	126	136	126	137	116	..	..
	January-September . . .	120	132	120	133	117	..	..

Sources: See "Notes to the Statistics".

<sup>a</sup> The expression "western European countries" is employed, for convenience of reference, to cover the following group of countries: Austria, Belgium-Luxembourg, Denmark, Finland, France, western Germany, Greece, Iceland, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

<sup>b</sup> Excluding Bulgaria, China, Czechoslovakia, Hungary, Poland, Rumania, the U.S.S.R. and Yugoslavia.

<sup>c</sup> For the United States, exports of special category commodities are excluded for all periods.

<sup>d</sup> Trade of eighteen western European countries with one another has been taken from export statistics.

<sup>e</sup> All overseas countries and eastern European countries.



The increase in prices was also the dominant element in the great rise in the dollar cost of European imports from overseas countries as well as in that of United States imports. The average unit value of goods imported from other countries by the eighteen western European countries listed in Table 1 rose, in the same period, to about the same extent as the corresponding index for the United States (that is, by rather over one-third<sup>1</sup>): European countries had to pay for larger increases in raw material prices,<sup>2</sup> but this was offset by the relatively small rise in the price of foodstuffs, which play a greater role in total European imports from overseas than they do in those of the United States.

The volume of European imports from overseas averaged about 12 per cent more in the first nine months of 1951 than in the same period of 1950. Allowing for seasonal factors in the third quarter, the increase, slow at first, was at an accelerating rate during the year.<sup>3</sup> The development in United States imports has been very different: after a period of exceptionally heavy importing from the outbreak of the Korean war until the first quarter of 1951, the trend was suddenly reversed and the volume of United States imports dropped by about 10 per cent in each of the two following quarters and fell well below the pre-Korean average. This opposing behaviour of European and United States imports is, as will be seen, one of the major factors underlying both the remarkable improvement in Europe's payments position until mid-1951 and its subsequent deterioration.

The volume of Europe's exports to overseas countries, which has roughly paralleled the rise in intra-European trade since 1949, has not quite maintained the extraordinarily high level reached in the last quarter of 1950. Even so, the export volume in the first nine months of 1951 averaged close to one-fourth more than in the same period of 1950 and almost one-half more than in the same period of 1949—a remarkable expansion in view of the great increase in home demand over this period. United States exports, which provide the major competition to

European exports, have also risen since Korea about as much as those of European countries, but show no increase as compared with the level in 1949, when the dollar aid which it gave to other countries was greater than at present. Although export prices of United States manufactures recently stopped rising, while those of European countries continued to increase moderately, the relative change has not yet been such as to influence significantly the price advantages resulting from the 1949 devaluations.<sup>4</sup>

#### *United States Prices and Trade*

In contrast to the strongly inflationary trends which predominated in the United States during the period from the beginning of the Korean war until the first quarter of 1951, the following spring and summer brought general easing of demand, redundant supplies of many consumer goods, a levelling-off of wage and price movements, a slowing-down in the rise in industrial production, and a shift back towards a substantial export surplus in foreign trade. The contrast between the two periods is shown in the summary indicators given below.

#### *Indicators of Economic Activity in the United States*

	Percentage change	
	June 1950 to Feb. 1951 (8 months)	Feb. 1951 to Oct. 1951 (8 months)
Retail trade <sup>a</sup> (value) . . . . .	+ 12	— 6
Manufacturers' sales <sup>a</sup> (value) . . . . .	+ 14	0
Industrial production <sup>a</sup> (volume) . . . . .	+ 11	— 1
Non-agricultural employment . . . . .	+ 5	+ 2
Wholesale prices . . . . .	+ 17	— 3
Consumers' prices . . . . .	+ 8	+ 2
Average hourly earnings in manufacturing industry (value) . . . . .	+ 7	+ 3
Total personal income <sup>a</sup> (value) . . . . .	+ 11	+ 6
Exports (volume) . . . . .	+ 14 <sup>b</sup>	+ 9 <sup>c</sup>
Imports (volume) . . . . .	+ 20 <sup>b</sup>	— 20 <sup>c</sup>

Source: *Survey of Current Business*, United States Department of Commerce, November 1950 and December 1951.

<sup>a</sup> Adjusted for seasonal variation.

<sup>b</sup> Change from second quarter 1950 to first quarter 1951.

<sup>c</sup> Change from first quarter 1951 to third quarter 1951.

<sup>1</sup> Unit values for the third quarter did not reflect the fall in current price quotations by that time.

<sup>2</sup> See page 13.

<sup>3</sup> The actual fall in the volume of overseas imports from the second to the third quarter was smaller than could be explained by the normal seasonal decrease. In comparison with the corresponding quarters of 1950, Europe's imports were, in 1951, 4, 11 and 19 per cent higher in the first, second, and third quarters, respectively.

<sup>4</sup> The total index of export prices for the United States, shown in Table 1, began to fall in the second quarter of 1951, while that of European countries began to accelerate its increase. This was due to the fact that Europe's non-manufactured exports are heavily weighted with products such as steel and wood-pulp, whose prices have continued to rise, while raw material exports from the United States are drawn more from the group which was affected by the break in international prices.

This move towards stabilization at home and even recession in import demand occurred despite a sustained rise in defence outlay from only 5 per cent of the gross national product before Korea to about 12 per cent by the end of 1951 and the expectation of still greater increases to come :

*United States Government Defence Expenditure*

	(Annual rates)					
	1950		1951		1952 <sup>a</sup>	
	Jan.- June	July- Dec.	Jan.- Mar.	July- Sept.	Early	Late
Billions of current dollars .	13	17	26	40	50	65
Percentage of gross national product . . . . .	5	6	8	12	15	19

*Sources : Survey of Current Business, U.S. Department of Commerce, November 1951, page 9, and Third Quarterly Report to the President by the Director of Defense Mobilization, 1 October 1951, pages 5 and 31.*  
<sup>a</sup> Estimate.

Along with the rearmament programme has also come, as in most other countries, a considerable expansion in private investment, especially in business

inventories, plant and equipment, and non-residential construction, these three items together running at an annual rate \$16<sup>2</sup>/<sub>3</sub> billion higher in the first nine months of 1951 than in the same period of 1950.

Various factors have contributed towards bringing inflation under control in the United States despite the rapid rise in defence claims on the national product, among them being the recent sharp tapering-off in the number of new houses started and in commercial construction, which were held down by credit and other restrictions. Even more important has been the remarkable quiescence of consumer demand. After adjustment for price increases, the volume of consumption expenditures in the second and third quarters of 1951 appears actually to have fallen moderately below the pre-Korean level, despite the substantial increase in employment and incomes over the period. The development of consumer incomes and expenditures since the beginning of 1950 is summarized in Table 2.

**Table 2**  
**PERSONAL INCOME AND CONSUMPTION IN THE UNITED STATES**  
*Billions of current dollars at annual rates*

Item	1950			1951	
	First and second quarters	Third quarter	Fourth quarter	First quarter	Second and third quarters
Personal income before taxes . . .	216.7	227.3	238.3	244.1	251.5
Taxes . . . . .	19.3	20.2	23.1	27.4	28.2
Savings . . . . .	10.7	4.6	16.8	8.5	21.2
Personal consumption . . . . .	186.7	202.5	198.4	208.2	202.1
of which :					
Durable goods . . . . .	26.4	34.3	29.4	31.5	25.6
Non-durable goods . . . . .	99.4	105.5	104.9	111.5	109.8
Services . . . . .	60.9	62.7	64.0	65.2	66.7

*Source : Survey of Current Business, United States Department of Commerce, November 1951, page 6.*

Compared with some 9 per cent before Korea, direct taxes rose to about 11 per cent of personal income by mid-1951, but the most striking change is the increase in personal savings from 5 to almost 10 per cent of income after taxes. This ratio is greater than at any time since the first half of 1946, when there was still a shortage of consumer goods. The explanation of the current sluggishness in consumer demand undoubtedly lies largely in the previous heavy stocking-up, especially in consumer durables. The maintenance of a high level of employment and production throughout most of the post-war period had already given

consumers ample opportunity to catch up on demands deferred from the war, and consumer purchases rose to new heights in the speculative excitement during the first nine months after Korea before military production had yet had time to interfere with the expansion of civilian production. After helping to initiate a strong upsurge of prices, the outpouring of consumer goods during this period and the accumulation of stocks by individuals and by business enterprises tended to produce its own cure for inflation in the domestic economy. A consumer reaction set in, prompted by growing resistance to high prices, the depletion of personal

savings, the piling up of new instalment debts to be paid, and restrictions on consumer credit.

While this consumer reaction was also evident to a considerable extent in European countries, especially in textiles, as will be seen in Chapter 2, the high level and the nature of consumer outlays in the United States have undoubtedly provided exceptional flexibility to the American economy, which has no parallel elsewhere in the conversion to military production and the struggle against inflation.<sup>1</sup>

The fact that such a large part of consumer expenditure in the United States is on durable goods means both that a substantial portion can be deferred without particular hardship or social friction, especially after such a period of re-stocking as has gone before, and that the metals and other raw material components as well as production capacity can be shifted to defence orders. The automobile and radio and television industries are the most typical examples. At the same time, the fact that consumer durables are, in large part, bought on a deferred-payments basis means that consumer credit restrictions constitute, in the United States, an exceptionally strong anti-inflationary weapon. Whereas, during the period from 1946 to 1950, the total amount of consumer credit in the United States rose by an average of almost \$3 billion each year and was thus a significant factor in consumption demand, the increase in required down-payments and shortening of maturities on instalment loans reversed the process and produced a moderate reduction during 1951 in the total volume of consumer credit outstanding.<sup>2</sup> The large proportion of personal expenditure which is devoted to durable goods for which demands may be postponed has thus proved to be an important factor in relieving inflationary pressure so far, because it makes it possible to induce a big increase in savings without the shift in income distribution which is the essence of inflation. This is what happened in 1951. However, a high rate of personal savings is not an unmixed blessing from the

point of view of anti-inflationary policy : when personal savings have reached a high level, direct taxation becomes a less reliable instrument for curbing inflation, because consumers are in a position to react to higher taxes by reducing the rate of savings rather than consumption.

Economic stabilization in the United States since early 1951 has provided in many ways, especially in its effects on commodity prices, a welcome relief from the inflationary impulses which prevailed for a number of months after the start of the Korean war. Along with this, however, has come a decline in United States imports, one of the main elements in the renewal of its balance-of-payments surplus and in the re-emergence of serious international payments difficulties in recent months. Some of the essential data concerning this as well as earlier critical periods since the war are plotted in Chart 1. It begins with the payments crisis of 1947, marked by an extremely wide gap between United States imports of goods and services and foreign payments to the United States, even though the former were slowly rising and the latter declining. The gap was evidenced by heavy drains on foreign reserves, the rapid drawing-down of the \$3¼ billion American loan of 1946 to the United Kingdom, and the threatening exhaustion of other financial resources available. This crisis was met by the inauguration of the European Recovery Programme and, by the end of 1948, other countries were even able to add moderately to their hard-currency reserves.

There had already set in at the end of 1948, however, a decline in United States imports of goods and services accompanying a moderate recession in industrial production, while other countries' purchases from the United States had again begun to rise. This second crisis, again evidenced by heavy losses of gold and dollar balances, ended with the currency devaluations of September 1949, although other remedial forces were already at work through a recovery in United States imports, as its industrial production revived, and through tighter restrictions imposed abroad on purchases from the dollar area. The following months appeared to mark steady progress towards the solution of the dollar problem : United States imports continued to rise, and other countries were able to add to their reserves while keeping their imports from the United States at a relatively low level. The outbreak of the Korean war at first accentuated this improvement. United States imports increased spectacularly in value,

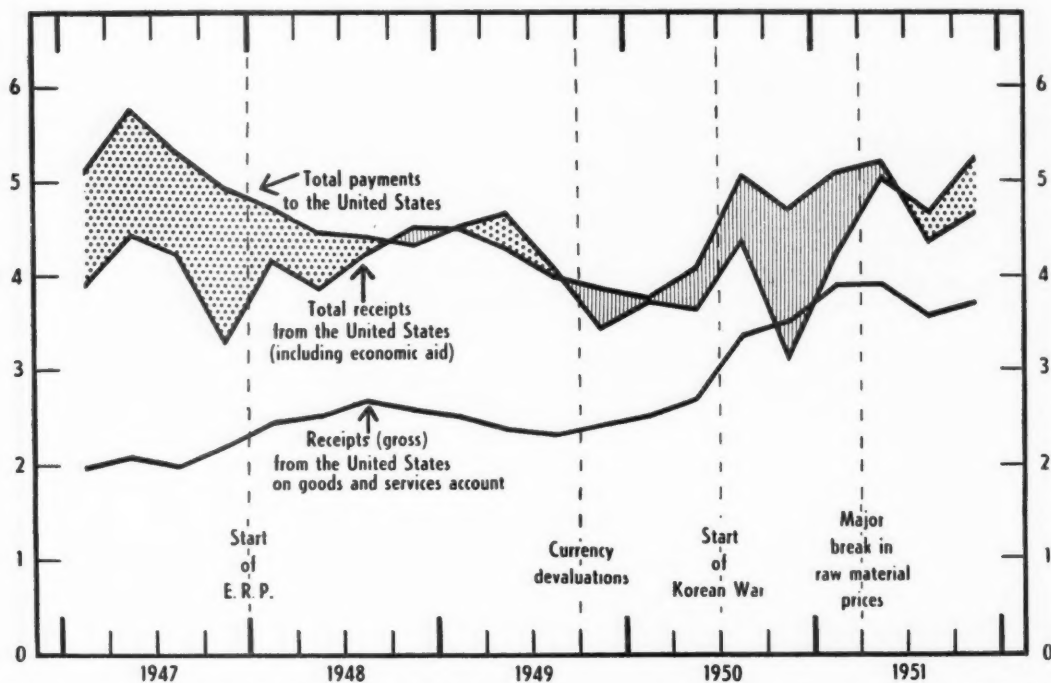
<sup>1</sup> The one other big industrial economy where such flexibility exists is the Soviet Union, but the underlying reasons are quite different. As discussed in Chapter 5, production of consumer durables is relatively low in the Soviet Union, but a closely centralized control facilitates the transfer of resources from civilian investment to defence.

<sup>2</sup> After falling during the war as consumers paid off their debts, the total amount of consumer credit outstanding in the United States rose from \$5.6 billion at the end of 1945 to a peak of \$20.1 billion at the end of 1950 and then receded to \$19.1 billion by the end of April 1951. See *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, November 1951, page 1424.

Chart 1

A. WORLD RECEIPTS AND PAYMENTS OF DOLLARS IN TRANSACTIONS WITH THE UNITED STATES

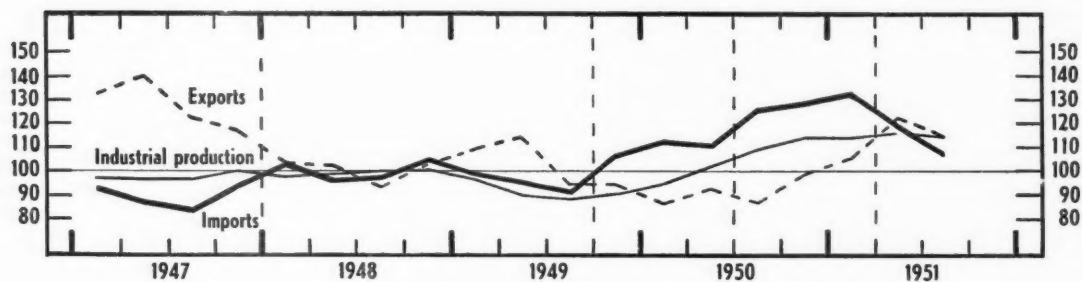
*Quarterly totals — billions of current dollars*



NOTE. — Dotted area represents net reductions in, shaded area net additions to, gold and dollar holdings of countries outside the United States. For details of the composition of the three curves, see "Notes to the Statistics".

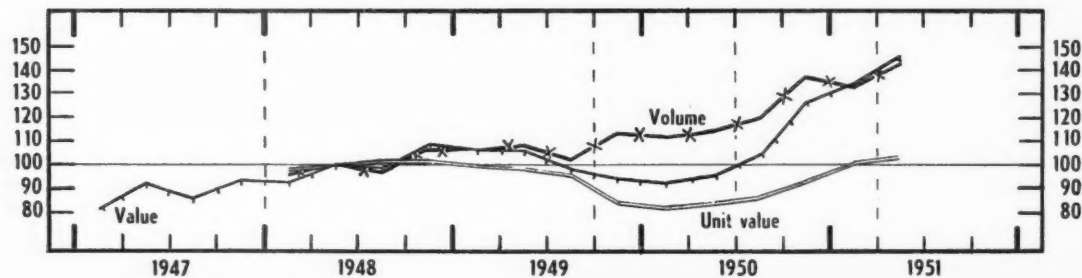
B. UNITED STATES FOREIGN TRADE AND INDUSTRIAL PRODUCTION

*Index numbers of volume — 1948 = 100*



C. VALUE, UNIT VALUE AND VOLUME OF WORLD TRADE

*Index numbers — 1948 = 100*



Sources: See "Notes to the Statistics".



although largely the result of rising raw material prices, and the growth in hard-currency reserves of other countries restored much of the loss which they had experienced in earlier periods of strain.

The third and most recent dollar crisis which began in the middle of 1951 resembled the 1949 crisis in that it was marked by a substantial fall in the level of total dollar payments by the United States to other countries. United States imports during the third quarter were considerably smaller than in the first half of the year (although, of course, greater in dollar terms than at the much lower prices prevailing before Korea) and, despite some recovery in the latter part of 1951, still remained well below the level of the first six months. The position was aggravated, moreover, by a decrease in the outflow of United States private funds and also by the gradual decline in the amount of economic aid extended by the United States Government, as illustrated by the greater drop in the curve of total receipts from the United States, shown in Chart 1, than in the curve of receipts on goods and services account. On all counts (excluding military aid), the amount of dollars paid out by the United States to other countries was, in the second half of the year, at an annual rate roughly \$2½ billion less than in the first half. This decline was at first relieved to some extent by a simultaneous, although smaller, decline in payments by foreign countries to the United States, and the situation differed in this respect from developments in 1949. Preliminary estimates for the fourth quarter indicate, however, that purchases of United States goods and services by other countries rose sharply again towards the end of the year, and the gap widened appreciably.<sup>1</sup>

In considering the significance of the reduced amount of dollars paid out by the United States to other countries in the second half as compared with the first half of 1951, account must be taken of the great rise already noted in the total value of world trade in general and of United States exports in particular since the middle of 1950. The current level of dollar payments would, of course, seem large by comparison with the pre-Korean period when international prices and the general volume of trade were much lower.

Seasonal influences served to accentuate the decline in United States imports during the third quarter,<sup>2</sup>

<sup>1</sup> The net drain on gold and dollar assets (including operations of the International Monetary Fund and the International Bank) is provisionally estimated at almost \$600 million in the fourth quarter compared with \$292 million in the third quarter. See the *Economic Report of the President*, January 1952, page 204.

especially in such agricultural products as wool and cocoa, but the extraordinarily low level of the total import volume—only 7 per cent greater than the 1948 rate, despite the substantial increase in real national income since that year—must be attributable to other and more powerful causes. For one thing, imports have undoubtedly been heavily influenced by the inventory liquidation under way in the United States during most of 1951, as consumer demand slackened and orders were cut back all along the line to domestic producers and importers. Direct evidence to this effect may be seen in the foreign trade statistics for wool, stocks of which in customs warehouses increased in the second quarter, as imports exceeded consumption, but fell during the third quarter. Similar changes occurred also in other major import goods, including coffee, cocoa, and cotton.

A second and perhaps still stronger influence affecting the recent trend of United States imports has been the sharp change in United States Government policy with respect to purchases for stockpiling. In contrast to the vigorous buying of strategic commodities during the first six or eight months after Korea—which, along with active private speculation in general and increased Chinese purchases of rubber in particular, brought a roughly threefold rise in the price of wool and rubber and a more than twofold rise in the price of tin—the United States Government in the spring and summer of 1951 ceased altogether its purchases of wool and of Malayan tin and sharply reduced its purchases of rubber.<sup>3</sup> The change was not so much in the ultimate objectives of the stockpile programme<sup>4</sup> as in its execution: purchases from abroad are now effected less through buying in the open market for current delivery and more through long-term contracts, coupled with the concentration of all imports of some of the more critical items in official agencies.<sup>5</sup>

<sup>2</sup> Details of United States commodity trade, permitting an analysis of import and export movements beyond the third quarter of the year, are not yet available.

<sup>3</sup> Compared with exports of 45,300 tons of tin from Malaya to the United States during 1950, the quantity fell to 2,600 tons in the first quarter of 1951 and thereafter disappeared altogether, while rubber exports from Malaya to the United States reached a peak of 100,100 tons (quarterly rate) during the first six months of 1951 and fell to 82,600 tons during the second half of the year.

<sup>4</sup> At the end of 1951, materials in the stockpile were valued at \$3.4 billion and more than \$2 billion additional were on order (including domestically produced as well as imported commodities). See *Fourth Quarterly Report to the President* by the Director of Defense Mobilization, 1 January 1952, page 24.

<sup>5</sup> For a detailed view of the changes in attitudes and policies concerning the execution of the stockpile programme, see the

A third but less clearly definable influence depressing United States imports has been the operation of the price ceilings imposed under the domestic anti-inflation programme. Little basis exists for judging its quantitative importance with respect to imports of manufactures, but the effects on at least one important raw material are clear. In the case of wood-pulp, Swedish exporters sharply reduced their allocations to the United States market for the second half of 1951 after notification that, from the beginning of July, no further price increases over the then ruling price for Finnish pulp would be permitted, while Swedish export prices to other markets were sharply increased for the last two quarters. (See Table XIX.) The fall in United States imports of lead and zinc from the high levels reached in the second half of 1950 is also mainly attributable to the fact that the prices ruling outside the United States were higher than the domestic ceilings set for these products at the beginning of 1951.

All three forces described above<sup>1</sup> have, of course, not merely affected the quantities imported into the United States, but have also served to reduce their prices, as was indeed the objective of the change in the execution of the stockpile programme in particular.

#### *The Dollar Crisis of the Sterling Area*

Several factors have combined to cause the current dollar difficulties to be primarily concentrated on the sterling area and, first and foremost, on the United Kingdom as the custodian of the central gold and dollar reserves for the sterling area as a whole. The rise of more than \$2½ billion which had been registered in the gold and dollar holdings of the

United Kingdom from the fourth quarter of 1949, following devaluation, to the second quarter of 1951, turned in the third quarter into a net loss of almost \$600 million. This loss was, in fact, about twice as great as the net amount of gold and dollar settlements received by the United States in that quarter, indicative of the fact that the sterling area's deficit was not with the dollar area alone but of a more universal nature.<sup>2</sup> The drain on gold and dollar assets held by the United Kingdom continued at an accelerated rate in the fourth quarter, reaching \$934 million including, or \$758 million excluding, the initial service payments made on the United States and Canadian loans at the end of the year. The movements in the trade of the sterling area with dollar countries and with Continental Europe, which account for most of this sweeping change in gold and dollar reserves, are shown in Table 3. The shift in trade balances from the first half to the third quarter of 1951, expressed at half-yearly rates, may be summarized as follows (the minus sign indicating either an increase in a deficit, as in the United Kingdom's trade with the dollar area and Continental Europe, or a decrease in a surplus, as in the rest of the sterling area's trade with these two groups of countries):

	(Millions of current dollars at half-yearly rates)
United Kingdom's trade with the dollar area	— 330
Other sterling countries' trade with the dollar area . . . . .	— 196
United Kingdom's trade with western Continental Europe . . . . .	— 262
Other sterling countries' trade with western Continental Europe . . . . .	— 269
TOTAL sterling area trade with dollar area and western Continental Europe . .	—1,057

various reports and records of hearings by the Preparedness Sub-Committee of the Committee on Armed Services of the United States Senate, especially the reports of 5 September and 20 November 1950 on surplus property and rubber; that of 27 November 1950 on agricultural products; that of 12 February 1951 on tin; and the hearings of 24 July 1951 on tin and rubber.

<sup>1</sup> A particular development working in the same direction, while quantitatively of relatively small importance in the overall dollar position, deserves mention because of the discouragement which it caused to European countries endeavouring to expand their sales in the United States market. These were the limitations, imposed by decision of the Congress, incorporated as a "rider" in the Defense Production Act, requiring the Secretary of Agriculture to restrict imports of cheese, which, in 1950, had been running at a rate of close to \$25 million per annum and were of considerable importance to several of the smaller European countries, particularly the Netherlands, Denmark, and Switzerland, as well as Italy. The United States administration is endeavouring to obtain repeal of this legislation.

Thus, the trade of the sterling area as a whole with dollar countries and Continental European countries took a sudden adverse turn equivalent to over \$2 billion per year in the middle of 1951.

Some of the reasons for this adverse shift in mid-1951 in the sterling area's trade and payments are more or less peculiar to the United Kingdom itself, the most important among them being, as discussed in Chapter 3, the need to build up stocks of key industrial materials following the reductions which had been

<sup>2</sup> The principal countries other than the United States gaining gold and dollars in the third quarter were western Germany and Belgium in Europe and Japan and Indonesia in the Far East.

Table 3

STERLING AREA'S TRADE WITH THE DOLLAR AREA AND WESTERN CONTINENTAL EUROPE

Half-yearly rates, millions of current dollars, f.o.b.

	Period	Exports	Imports	Balance
<i>Trade with dollar area</i>				
Exports and imports of the United Kingdom	1950—First half . . .	374	567	—193
	Second half . . .	512	633	—121
	1951—First half . . .	530	840	—310
	Third quarter <sup>a</sup> . . .	560	1,200	—640
Exports and imports of the rest of sterling area <sup>b</sup>	1950—First half . . .	550	375	+175
	Second half . . .	665	340	+325
	1951—First half . . .	1,035	545	+490
	Third quarter <sup>a</sup> . . .	952	658	+294
<i>Trade with western Continental Europe <sup>c</sup></i>				
Exports and imports of the United Kingdom	1950—First half . . .	761	751	+ 10
	Second half . . .	792	847	— 55
	1951—First half . . .	913	1,196	—283
	Third quarter <sup>a</sup> . . .	830	1,375	—545
Exports and imports of the rest of sterling area	1950—First half . . .	617	300	+317
	Second half . . .	783	461	+322
	1951—First half . . .	1,243	678	+565
	Third quarter <sup>a</sup> . . .	1,127	831	+296
Total exports and imports of the sterling area in trade with dollar area and western Continental Europe <sup>c</sup>	1950—First half . . .	2,302	1,993	+309
	Second half . . .	2,752	2,281	+471
	1951—First half . . .	3,721	3,259	+462
	Third quarter <sup>a</sup> . . .	3,469	4,064	—595
<i>Intra-sterling-area trade :</i>				
United Kingdom's exports to and imports from the rest of sterling area	1950—First half . . .	1,341	1,172	+169
	Second half . . .	1,480	1,204	+276
	1951—First half . . .	1,615	1,728	—113
	Third quarter <sup>a</sup> . . .	1,869	1,691	+178

Sources : Calculated from Table 11 and Table XXVII. See "Notes to the Statistics". Data for the "Rest of sterling area's trade with Continental Europe" have been taken from the European side.

<sup>a</sup> Half-yearly rate.

<sup>b</sup> Excluding Union of South Africa.

<sup>c</sup> All non-sterling countries listed in Table XXVII.

made in 1950.<sup>1</sup> A further important reason for the concentration of the present dollar problem in the United Kingdom is, however, quite simply that the commodities mainly affected by the great ups and downs in prices and trade since the outbreak of the

<sup>1</sup> The failure of the United Kingdom to produce enough coal to provide more than a trickle of exports is also, of course, a factor in its own balance-of-payments problems and in the dollar difficulties of Continental Europe (see Chapter 6), but was not a major reason for the sudden deterioration in the United Kingdom's position in the middle of the year.

Korean war are primarily products of the sterling area. Indeed, the balance-of-payments history of Europe and of the United Kingdom in particular during the past two years can be told largely in terms of the boom and collapse of the market for three raw materials produced mainly outside Europe—rubber, wool and tin. The importance of these products in influencing balance-of-payments relationships over this period can be readily seen from the following figures, showing the movement in total imports of the

three commodities by the United States and by principal countries in western Continental Europe. The figures are expressed in dollar value, reflecting changes in prices as well as in quantity :

(Millions of current dollars at half-yearly rates)				
	1950		1951	
	1st half	2nd half	1st half	3rd quarter
United States . . . . .	428	660	990	786
Western Continental Europe <sup>a</sup>	547	669	1,167	823
TOTAL . . . . .	975	1,329	2,157	1,609

<sup>a</sup> Includes western Germany, France, Italy, Belgium-Luxembourg, Netherlands, Switzerland, Sweden and Denmark. The figures for these countries are c.i.f. import values, whereas those for the United States are reported f.o.b.

In other words, chiefly because of the phenomenal rise in prices of wool, rubber and tin, export receipts from the United States and western Continental Europe by the countries <sup>1</sup> producing these commodities, primarily the sterling area, totalled \$1.5 billion more during the twelve months from mid-1950 to mid-1951 than during the six months preceding Korea, at an annual rate, and then, in the third quarter of 1951, fell by an amount equivalent to \$1.1 billion per year.

The first effect of the earlier upturn in trade in these products was the spectacular improvement in the exchange receipts and reserves of the producing countries—or, in the case of the sterling area, in the foreign exchange assets of the United Kingdom, although offset by the increase in its own sterling liabilities to other members of the sterling area. This would have been, in a narrow financial sense, a net gain had there been no offsetting increase in the imports of the beneficiary countries. But this is, of course, what inevitably happened (as clearly emerges from Table 3) under the inflationary impact of the rise in prices and incomes in primary producing countries and the easing of import controls as exchange reserves mounted.<sup>2</sup> In fact, the rise in

<sup>1</sup> It should be noted that the statistics cited on imports of wool, rubber and tin by the United States and western Europe include imports from all sources and not from sterling area countries alone, although it may be roughly estimated that the proportion of world exports of these products supplied by the sterling area amounted to 70 to 75 per cent in 1950.

<sup>2</sup> The Annual Report of the International Monetary Fund, issued in July 1951, noted "evidence of increasing willingness to relax restrictions on a wider basis," and gave a brief review of the measures taken up to that time, especially in India, Australia, and New Zealand.

This relaxation was not merely the result of unilateral decisions, but was also undertaken in response to various formal commitments of an international nature. In its *Second Annual Report on Exchange Restrictions*, issued in April 1951, the International

imports began to gain headway just about the time when the collapse in the market came, and the crucial shift in the trade balance of the sterling area depicted above was due only partly to the fall in export receipts and rather more to the increase in their import bill. A substantial part of this increase was, of course, due to the rise in the prices of their own imports, particularly in the case of the United Kingdom's imports from the dollar area, which consist largely of primary commodities, although the increase in volume was the preponderant element in overseas sterling countries importing largely manufactured goods.

Recent experience shows how movements in primary prices act as a two-edged sword for some European countries, particularly the United Kingdom. When prices of raw materials and foodstuffs are relatively high, they tend to worsen its terms of trade and thus to lower its real income, but, owing to its currency relationship with overseas sterling countries, the foreign exchange position of the area as a whole is benefited. Low prices of primary goods work in the opposite direction, favouring the terms of trade and real income of the United Kingdom but at the expense of lower foreign exchange receipts from the exports of overseas sterling countries. These contrasting effects on real income on the one hand and the foreign exchange position on the other explain the anomaly that, whether primary prices appear to be high or appear to be low, serious concern is invariably expressed for the consequences. Clearly, however, the most unfavourable situation of all is when, as during the past two years, primary prices shoot upwards, raising money incomes and foreign exchange receipts, followed by an abrupt reversal of the price movement and a deterioration in the exchange position.

Monetary Fund reviewed the changes which had occurred in international payments and stated: "The Fund is keenly aware of the difficulties of a new character which confront a number of its member countries, but nevertheless it believes that the very general improvement in balance-of-payments positions and prospects of its members justifies a relaxation or removal of restrictions and, particularly, of discrimination."

Earlier, at the Fifth Session of the Contracting Parties to the General Agreement on Tariffs and Trade, held at Torquay in the latter part of 1950 and early 1951, the representatives of the United States, as well as those of Belgium, Canada, and Cuba, expressed the view that "the time had come when, with all due caution in the light of the uncertainties of the present situation, a progressive relaxation of the hard-currency import restrictions of Australia, Ceylon, New Zealand, Southern Rhodesia and the United Kingdom might begin. This view was based upon their analysis of the favourable current situation of these countries and the prospects for the coming year." (Quoted from Press release issued at Torquay, 13 December 1950.)



Some of the forces which have produced the present foreign exchange crisis are likely to bring more or less automatic adjustments which would at least ease the payments situation of the sterling area. Stock building in the United Kingdom will no doubt largely cease, and the other sterling countries' demand for imports, which rose as the proceeds of their exports increased, is likely to fall off now that raw material prices have declined. The United States demand for imports, on the other hand, can hardly remain indefinitely at its present low level. Even in the unlikely event that rising defence expenditure brings no upturn in industrial production, a higher volume of imports of materials (though not, perhaps, of rubber) will probably be needed in order to replenish inventories (quite apart from any increase in the rate of intake into the Government stockpile).

But all this may take time, and in the meanwhile there are other more specific factors at work, described in detail in Chapter 3, which may tend to increase the proportion of certain imports by the United Kingdom which have to be paid for in dollars. If further substantial American economic aid to the United Kingdom beyond the \$300 million agreed to is ruled out, it seems inevitable, therefore, that there will have to be some deliberate offsetting cuts in the direct dollar imports by sterling area countries in addition to the curtailment of imports from Continental Europe already announced by the Government of the United Kingdom. The speed with which the present crisis can be overcome depends on the speed with which agreement can be reached on the distribution of these cuts among the various members of the sterling area.

#### *Benefits from the Fall in Import Prices*

Unlike the United Kingdom, where the deterioration in its gold and dollar position must be set against the improvement in its terms of trade resulting from the fall in international raw material prices, most other western European countries stood to gain on both counts.<sup>1</sup>

The relative importance of recent movements in the prices of imported raw materials in several leading

European countries compared with the United States becomes apparent from an examination of Table 4. Although limited to nine major commodities, the total for the group, including both imports and home production, may be taken as constituting four-fifths or more of the raw materials base for all industries excluding food processing.<sup>2</sup> It will be noted that, in all four of the European countries listed in the table, as well as in the United States, the increase in the prices of imported materials from the first half of 1950 to the first quarter of 1951 was greater by far than the rise in the prices of materials produced at home. The significance of the rise, as well as the subsequent fall, in the prices of imported raw materials, however, has been very much greater to European countries than to the United States.

In the United States, imports of the materials in question accounted for only about one-eighth of total domestic consumption, thanks to its relatively great self-sufficiency, whereas imports made up 50 per cent or more of consumption in the western European countries listed, with the exception of western Germany, and even in this case their relative importance was more than twice as great as in the United States. The data tend, if anything, to understate the disparity in this respect between the United States and western European countries, since in western European countries that part of production which is shown as domestic incorporates, in some cases, a significant amount of imported fuels and ores. This factor is particularly important in the case of Italy, which is dependent on imports for virtually the whole of its supplies of coal and coke as well as iron ore, and probably explains why the price increases indicated for domestically produced materials in Italy have been very much greater on the whole than in other countries.

The fortunate position of the United States as the major producer of its own raw materials, other than wool, rubber and tin, also tends to place it in a strong bargaining position both as an exporter and as an importer, and is enhanced by the attraction of the dollar as a hard currency. By virtue of this position, the United States has been able, through export

<sup>1</sup> Some of the immediate gains in the form of gold or dollar settlements received by creditor countries in the European Payments Union, as their surpluses with the sterling area increased in the second half of 1951, will, of course, prove to be temporary in so far as the remedial measures taken by the sterling area involve a reduction in imports from the countries in question. See Chapter 3 of the present SURVEY for a further discussion of payments relationships within the E.P.U.

<sup>2</sup> The principal raw materials not included in the table are zinc and other secondary non-ferrous metals, timber, hides and skins, industrial chemicals, and hard fibres. Other items, although of relatively small quantitative importance, are ferro-alloys, dyes, waxes, etc. Coal and other forms of energy are not shown separately, but their industrial use is principally in the commodities listed, especially steel, aluminium and wood-pulp.

**Table 4**  
**INDEX NUMBERS OF THE PRICES OF SELECTED INDUSTRIAL MATERIALS IN FIVE COUNTRIES**  
*First half of 1950 = 100*

Commodity	Origin of commodity	United States			United Kingdom			France			Western Germany			Italy		
		Percentage of total consumption of commodities listed	Price index 1951		Percentage of total consumption of commodities listed	Price index 1951		Percentage of total consumption of commodities listed	Price index 1951		Percentage of total consumption of commodities listed	Price index 1951		Percentage of total consumption of commodities listed	Price index 1951	
			First quarter	Third quarter		First quarter	Third quarter		First quarter	Third quarter		First quarter	Third quarter		First quarter	Third quarter
Aluminium . . . . .	Domestic Imported	1.6 0.4	111 118	111 120	0.6 1.5	110 119	110 106	2.1 —	102 —	114 —	2.1 —	121 —	121 —	3.1 1.2	110 110	114 114
Copper . . . . .	Domestic Imported	2.9 0.9	127 127	127 144	3.0 3.8	124 124	142 142	0.8 3.9	127 127	145 145	3.9 2.2	124 152	139 180	0.6 3.1	225 225	225 225
Lead . . . . .	Domestic Imported	1.3 0.7	148 157	148 170	1.5 1.5	141 141	192 192	1.4 0.6	148 152	161 160	1.8 —	143 —	146 —	1.6 0.4	176 176	131 131
Tin . . . . .	Imported	0.9	219	136	1.4	224	153	1.2	226	150	0.7	218	148	1.0	199	147
Steel . . . . .	Domestic Imported	58.5 1.4	108 140	108 185	39.2 1.4	105 130	125 175	39.6 0.7	103 150	126 200	54.4 1.0	111 138	126 200	35.2 8.8	136 160	150 210
Wood-pulp . . . . .	Domestic Imported	9.7 1.8	118 138	118 150	0.6 5.9	115* 150	130* 265	4.6 4.3	125 225	158 283	6.3 1.6	158 240	183 410	3.5 3.5	160 257	175 305
Rubber . . . . .	Domestic Imported	1.6 2.7	132 313	135 223	— 3.6	— 322	— 255	— 3.6	— 322*	— 255*	— 2.5	— 322*	— 255*	— 2.0	— 292	— 229
Cotton . . . . .	Domestic Imported	10.9 0.4	138 142	113 100*	— 16.4	— 174	— 150	— 18.0	— 159	— 145	— 13.7	— 170	— 150	— 22.0	— 175*	— 150*
Wool . . . . .	Domestic Imported	0.8 3.5	220 240	135 140	1.1 18.5	250* 264	130* 115	1.5 17.7	250 250	150 142	1.3 8.5	217 219	121 111	3.0 11.0	180 190	160 120
Total of nine commodities	Domestic Imported	87.3 12.7	115 209	112 164	46.0 54.0	111 206	128 158	50.0 50.0	111 208	130 165	69.8 30.2	119 199	132 165	47.0 53.0	141 187	150 170
	Total	100.0	127	118	100.0	163	144	100.0	159	148	100.0	143	142	100.0	166	161

Sources: See "Notes to the Statistics".

NOTE. — The figures relate to refined metals, finished steel and raw cotton, wool and rubber only. The weights are computed from the total tonnage consumption for all purposes of the given commodity in the given country in the whole year 1950 multiplied by the average domestic price quotation in the

first half of 1950, for the domestic index, and the average import quotation, for the import index. The index numbers relate generally to market price quotations or wholesale price quotations. In some cases, however, for the import quotation, it has been necessary to resort to import unit values derived from trade statistics. For further details, see "Notes to the Statistics".

licensing, to retain for its own use and subject to its own price controls the required amounts of those materials of which it is a supplier to the world's markets and, in most cases, to hold off from buying imported materials except at prices within the controlled limits. Although the allocation machinery, established under the International Materials Conference, has served to distribute a number of materials in short supply—as in the case of sulphur, ferro-alloys, and some of the non-ferrous metals—European countries have found it necessary to cover a substantial part of their import requirements from marginal suppliers at premium prices.

To take a few of the more important examples, it will be seen that the price of cotton in the United States, supplied almost entirely by its own production, was only 13 per cent higher in the third quarter of 1951 than in the first half of 1950, whereas western European countries were paying 50 per cent more for the imports on which they were wholly dependent. In the case of wood-pulp, the price increase in the United States was only 18 per cent for the domestic product, covering more than nine-tenths of its consumption, and about 50 per cent for the imported remainder,<sup>1</sup> whereas the price increases in the western European countries listed were two or three times as great for imports, on which they were mainly dependent, and were also substantial with respect to their home production. In the case of copper metal, the domestic prices in the United States had increased by 27 per cent, applicable to three-fourth of its consumption, and by 44 per cent on the smaller part which was imported. For European countries, however, the import price was generally of predominant importance and, in the more extreme instances, had gone up by as much as 80 per cent in western Germany and 125 per cent in Italy.

<sup>1</sup> United States import prices for European wood-pulp have increased by about as much as the import prices of European countries, but the major part of United States imports consists of Canadian wood-pulp, the prices of which have risen only moderately.

The combined effect of the factors discussed above was that, in the first quarter of 1951 compared with the six months preceding Korea, the average level of prices for the raw materials listed in Table 4 had risen very much more in western European countries than in the United States, the disparity being in the order of 25 to 30 per cent in the case of the United Kingdom, France and Italy, although only about 17 per cent in the case of western Germany which, as mentioned above, supplies a greater share of its raw material requirements than the three other countries. On the other hand, the decline in the prices of some of the major internationally traded commodities since the beginning of the year has been sufficient to bring, by the third quarter, a reduction in the average level of raw material prices in three of the four western European countries, despite the fact that prices of their domestically produced materials, dominated by steel, had continued to rise. In the United Kingdom the decline in the general average was sufficient to reduce significantly the disparity as compared with price movements in the United States, and thus to improve its competitive position, compared with the beginning of the year, as far as raw material costs are concerned. In addition, the fall in raw material prices has, of course, helped to reverse to some extent the previous trends in the terms of trade and to provide a more favourable environment for the struggle against inflation.

By the end of the year, the relative position of European countries may have improved still more, compared with their disadvantageous price relationships at the beginning of 1951, because of some narrowing of the premium on marginal supplies, especially in the case of cotton, as noted in Chapter 2. On the other hand, the re-emergence of serious dollar difficulties in the latter part of the year carries with it the risk of intensified demand for materials from non-dollar sources and of a renewed widening of these price differentials.

## 2. THE SIGNIFICANCE OF RECENT CHANGES IN TRADE AND PAYMENTS

### *The Problem of Short-run Fluctuations*

The history of the past several years, looked at in the light of the data which have been presented in Chart 1, point to the conclusion that relatively

small shifts in the relationship between receipts and payments are sufficient to spell the difference between dollar plenty and dollar shortage. Thus, in 1949, at the peak of the drain on the gold and dollar resources of other countries, the gap between receipts from the

United States and payments to the United States was less than one-tenth of the gross amounts in either direction, and this is also true of the deficit during the second half of 1951.

Recent experience also justifies the observation that such fluctuations in trade and payments are bound to occur, even under relatively favourable circumstances, and that institutions and policies must be adapted to meet them.<sup>1</sup> It is true that, as the preceding analysis has shown, the present crisis has its origins largely in the extraordinary forces released by the war in Korea, particularly the violent rise and fall in the prices of certain key raw materials and concurrent shifts in American stockpile policy. Apart from these special influences, however, United States imports have manifested considerable sensitiveness to relatively small fluctuations in the domestic economy. This was evidenced in the 1949 dollar crisis, both in the recession and in the revival phases of United States industrial production,<sup>2</sup> and it is particularly significant that, during 1951, a mere halt in the upward movement of industrial production, with no actual decline, was apparently sufficient to induce a temporary falling-off in the volume of imports. These variations are the natural and inevitable expression of the marginal role which imports of a number of commodities play in the American economy, coupled with the tendency of small changes in industrial production to be magnified in the level of business inventories. It would be unrealistic to assume that fluctuations of this nature will not recur from time to time in the future.

Variations in the level of internal activity and foreign trade in different countries were of course a normal feature of economic life in earlier periods, but there are several reasons why even minor disturbances now have serious repercussions on international payments in general and on the position of European

countries in particular. One important reason is that exchange reserves have not yet recovered since the war to a point commensurate with the great increase in international prices and the volume of international trade from the pre-war to the post-war period.<sup>3</sup> Nor, indeed—it is fair to recall—could the gold and dollar reserves of European countries have been built up much more rapidly during the post-war period without appearing to run counter to the objectives and policies of the European Recovery Programme.<sup>4</sup> The aid given was intended to be used to build up the production capacity and living standards of European countries, and the accumulation of so-called “idle reserves” was not only not encouraged, but even appears to have been a major consideration in the suspension of further economic assistance to the United Kingdom in late 1950. The inadequacy of exchange reserves, accentuated by the more than twofold rise in the general level of dollar prices in world trade from the pre-war to the post-war period, while the official price of gold has remained constant, necessarily means that European countries are more exposed to the storms that blow than was the case in earlier decades.

A second reason, related to the first, for the greater vulnerability of balances of payments to variations in international trade, is the increased sensitiveness of private capital flows and the perverse role which they have come to play in magnifying the strains which may develop.<sup>5</sup> The experience of 1949, analysed in

<sup>1</sup> On the general problem of fluctuations in international payments, see *Measures for International Economic Stability*, a Report by a Group of Experts appointed by the Secretary-General of the United Nations, November 1951.

<sup>2</sup> The decline in the volume of United States imports from the fourth quarter of 1948 to the third quarter of 1949 was roughly the same as the decline in United States industrial production (about 12 or 13 per cent in each case), but the movement was accompanied by a considerable weakening of primary prices, and the decline in the total value of United States imports over that period was about 20 per cent. The recovery phase was marked by an increase in the volume of imports by more than 20 per cent from the third quarter of 1949 to the first and second quarters of 1950, while industrial production rose by only half as much, and a renewed strengthening of primary prices added further to the dollar earnings of other countries.

<sup>3</sup> Thus, during the 1938 recession, exports of the sterling area as a whole to the United States fell by more than one-third in volume and by almost 50 per cent in dollar value, compared with the 1937 levels, and the ensuing deficit in the sterling area's balance of payments produced a decline in the gold and dollar reserves held by the United Kingdom from \$3.3 billion at the end of 1937 to \$2.5 billion at the end of 1938. These movements, however, gave rise to no serious alarm; even after this decline, the United Kingdom's gold and dollar reserves were still almost equal to the total imports of the entire sterling area from the dollar area and from western Europe during the year 1938. By contrast, at the end of 1951, the gold and dollar reserves of the United Kingdom, although still well above the low point reached in September 1949, were equal to only about one-third of the total value of the sterling area's imports from the dollar area and western Europe during the year (first nine months expressed at annual rates).

<sup>4</sup> The National Advisory Council has expressed the policy as follows: “Economic assistance on a grant basis should not be extended for the purpose of increasing gold and dollar reserves, nor should countries participating in the defence effort be required to reduce their present level of reserves as a prerequisite for receiving United States aid.” *Semiannual Report to the President and to the Congress*, dated 18 September 1951.

<sup>5</sup> This comparison relates to the period of the operations of the gold standard. By the middle 'thirties, of course, movements of “hot money” had become very important.



the SURVEY for that year,<sup>1</sup> clearly showed that flight of capital was a major factor in the gold and dollar losses experienced by European countries at that time, and, as shown in Chapter 3, this experience is now being repeated.

Finally, experience over the past year strongly suggests that present institutions and policies, both national and international, are not yet satisfactorily adapted to the task of foreseeing and counteracting the strains which tend to arise in international trade and payments. Perhaps more than any other, the present crisis could have been foreseen and advance preparations made to deal with it. Even before the break in raw material prices came in the early part of the year, the likelihood of such a fall in the case of wool, rubber and tin in particular, was inherent in the very levels to which they had soared<sup>2</sup> and the consequences were apparent in the inflation and distortion in international payments which the price increase itself generated. The break in prices, when it actually came, was a further and far more definite warning of trouble ahead, and by the middle of the year the effects had become registered in the actual flow of international payments and in the drain which began in July on the United Kingdom's gold and dollar holdings. There is little evidence, however, that the authorities in either of the two countries principally concerned—the United Kingdom and the United States—had begun to adjust their thinking and policies to meet these difficulties.

The failure on the side of the United States to evaluate adequately the effects on international payments and reserve positions, either on the upswing or on the downswing, is apparent from the abrupt and sweeping changes in the execution of its stockpile programme at the start of the Korean war and again after the turn of the year. However artificial the levels of prices, incomes and exchange receipts in the producing countries had become, the reversal of the process could scarcely fail to have painful conse-

quences.<sup>3</sup> Yet, at the same time, on the strength of the temporarily continuing rise in gold and dollar reserves abroad, the effort was made to press on towards the long-run objectives of freeing international trade and payments from quantitative controls and other forms of direct State intervention, while the United States itself, faced with the necessity for firm controls to execute its armaments programme and yet restrain inflation, resorted to State trading on an extensive scale for the procurement of strategic commodities and to the tightening of export controls for a wide range of goods in short supply. The problem here posed, it should be noted, relates not to the necessity for the various measures taken, but rather to their consistency with other objectives simultaneously pursued and to the apparent failure to appraise adequately their international repercussions, despite the unprecedented amount of energy and resources devoted to programmes of foreign aid and economic co-operation.

On the side of the United Kingdom, the lack of preparation for dealing with the consequences of the rise and fall in the prices of sterling area exports is indicated by the fact that it was not until November that the first tightening of restrictions on imports was imposed and then only with respect to purchases from other European countries. Not until January 1952 did the Finance Ministers from other members of the sterling area meet in consultation, although, as seen above, the increase in imports of these countries had played a key part in the development of the crisis.<sup>4</sup> Whatever curtailment may be agreed upon dollar expenditures—under circumstances where the reconciliation of divergent interests of the various members poses fundamental difficulties—will scarcely

<sup>1</sup> See SURVEY for 1949, pages 124-126.

<sup>2</sup> As noted in the SURVEY for 1950, page 8, "The rise in the prices of many raw materials during the year, accompanied by an upward movement in the whole level of prices and a disruption of the price structure, was, however, far more violent than can be accounted for by the underlying disequilibrium between production and consumption.... Rubber and tin are outstanding instances where current and prospective production appears adequate or more than adequate to meet consumption needs, but where price increases have nevertheless been particularly great".

<sup>3</sup> *The Annual Economic Review* by the Council of Economic Advisers (a report to the President of the United States accompanying his own *Economic Report* to the Congress, dated 16 January, 1952) comments on these effects as follows: "Although the effect of actual stockpiling operations in the post-Korean rise of raw material prices was much less than was widely believed, it is an important potential factor in the markets for the stockpiled commodities. When it is necessary to accelerate purchases this should be done carefully to avoid violent alternations of heavy purchasing and complete withdrawal from the market" (p. 131). The Council's *Review* does not, however, specifically relate these operations to recent changes in international payments.

<sup>4</sup> Several of the overseas sterling area countries have been running impressive trade deficits during the second half of 1951. Thus, for instance, Australia had a total import surplus of \$365 million from July to October 1951 (against only \$11 million in the corresponding period of 1950). Similarly, the total trade deficit of the Union of South Africa has risen from \$58 million in July-October 1950 to \$190 million during the same four months of 1951.

be effective until some months later ; that is, a full year or more after the great break in the prices of raw material exports occurred.

### *Problems of a Long-run Character*

The problems described above in meeting short-run disturbances in international payments are rendered more serious by other difficulties of a structural or institutional character. One of these problems, discussed in Chapter 3, arises from the considerable share held by textiles and other consumer goods in the exports of the leading European trading countries (with the exception of Germany) in view of the unfavourable current and prospective developments in foreign markets for these goods. As a result, further increases in the over-all volume of European exports will require still greater increases in exports of metal and engineering goods—that is in those branches of production where the competition between armaments and exports is sharpest. Developments in the United States—especially the rapid expansion of its own production and the effort to build up home capacity to replace imports from more distant sources—will make it more difficult to strike a balance between what it is prepared to import, on the one hand, and what it would like to sell and other countries would like to buy from it, on the other hand.

A further and more intricate problem arises from the special monetary and trade relationship linking some of the leading western European countries, chiefly the United Kingdom and France, with overseas areas. The problem is not simply that, because of closer ties and preferential trading relationships, exporters in these countries have found it easier or more profitable to expand their sales in the affiliated overseas areas than in other markets where hard currencies might be earned : to the extent that necessary imports are obtained in return, the effect on the balance of payments is neutral. The problem arises precisely because, under existing financial relationships, exports can and do go out in great volume without bringing in an equivalent return in imports. This is illustrated by the recent experience of France, whose exports during 1951 were directed in increasing proportion to other countries of the franc area and resulted in a trade surplus with them of \$600 million, or twice as large as that of 1950, while serious payments difficulties developed in other directions. The explanation of this shift no doubt lies chiefly in the complete

freedom with which capital can move within the franc area.

In the case of the United Kingdom, the problem is rendered far more complicated by the heavy sterling liabilities arising from the war. Such liabilities towards non-sterling countries are now somewhat lower than at the end of the war, but those owed to other members of the sterling area are much higher,<sup>1</sup> despite the fact that during the whole of the period after 1946 the United Kingdom has shown a large surplus on goods and services account with them. The major reason, as may be seen in Table 5, is that the heavy, though somewhat irregular, outflow of private capital from the United Kingdom to other parts of the sterling area has constantly served to replenish their banking balances in London and over the five and a half years ended in June 1951 slightly more than offset the United Kingdom's surplus on goods and services. After falling off in 1950, the outflow rose again in the first half of 1951 to an annual rate of almost £200 million. A second reason is that, taken as a whole, the overseas sterling group has generally had an export surplus in trade with the dollar area and Continental Europe, and the proceeds in dollars or other exchange have accrued to the central reserves in London against additional claims in sterling.

This second factor—the provision of dollars and other currencies to the United Kingdom's exchange resources against accretions of sterling balances—constitutes, of course, the great advantage of the system to the United Kingdom in view of its own usually large, though variable, hard-currency deficit. Two qualifications, however, should be noted. First, it is the colonial dependencies in the sterling area which provide the dollars, whereas the independent members have been heavy net claimants on the central reserves.<sup>2</sup>

<sup>1</sup> The sterling balances of the "Rest of the Sterling Area" rose by £644 million from the end of 1945 to June 1951, when they amounted to £3,098 million. Less than one-third, or £908 million, of this was owned by the colonies, and £2,190 million by the independent members of the sterling area. The individual countries' holdings in the latter figure cannot be ascertained from the United Kingdom's statistics, but information published by these countries themselves indicates the order of magnitude of largest holdings : Australia and India about £650 million each, Ireland about £300 million, Pakistan about £200 million, New Zealand, Ceylon and the Union of South Africa about £100 million each.

<sup>2</sup> As noted in Table 5, the Union of South Africa has, since October 1947, settled most of its dollar deficit directly with the countries concerned, without recourse to the central reserves. It has, however, continued to sell gold to the United Kingdom against sterling, and accounts for the preponderant part of the gold sales listed in Table 5.

Table 5

FACTORS ACCOUNTING FOR CHANGES IN BALANCES HELD IN UNITED KINGDOM  
BY REST OF STERLING AREA<sup>a</sup>

Millions of current pounds sterling

	1946	1947	1948	1949	1950	1951 First half	Total 1946 to June 1951
<b>1. Transactions increasing sterling balances :</b>							
Surplus with dollar area—Dependent R.S.A. . . . .	+ 28	+ 2	+ 41	+ 43	+134	+112	+360
Gold sales to United Kingdom—All R.S.A. . . . .	+ 82	+ 84	+ 55	+ 68	+100	+ 41	+430
Capital outflow from the United Kingdom—All R.S.A. . . . .	- 60	+270	+148 <sup>b</sup>	+279 <sup>b</sup>	+134	+ 98	+869
Surplus with non-dollar areas—All R.S.A. <sup>c</sup> . . . . .	- 32	-108	+182	+ 4	+210	+127	+373
Total . . . . .	+ 18	+248	+416	+394	+578	+378	+2,032
<b>2. Transactions decreasing sterling balances :</b>							
Current account deficit with Un. Kingdom—All R.S.A. . . . .	+ 39	-102	-232	-273	-218	- 46	-832
Deficit with dollar area—Independent R.S.A. <sup>d</sup> . . . . .	- 94	-275	-118	-132	+ 18	+ 36	-565
Total . . . . .	- 55	-377	-350	-405	-200	- 10	-1,397
<b>3. Increases (+) or decreases (-) in sterling balances :</b>							
Dependent territories in Rest of Sterling Area . . . . .	+ 48	+ 7	+ 46	+ 27	+171	+154	+453
Independent members of Rest of Sterling Area . . . . .	- 85	-136	- 20	- 38	+207	+214	+182
Total . . . . .	- 37	-129	+ 66	- 11	+378	+368	+635

Sources : Rearranged from *United Kingdom Balance of Payments*, 1946 to 1950 (Cmd. 8201) and 1948 to 1951 (Cmd. 8279), H.M.S.O., London.

<sup>a</sup> The "Rest of Sterling Area" as a whole is referred to in the table as "All R.S.A.", the colonial dependencies as "Dependent R.S.A.", and the independent members (Australia, Burma, Ceylon, Iceland, India, Iraq, Ireland, Jordan, New Zealand, Pakistan, Southern Rhodesia, and the Union of South Africa) as "Independent R.S.A."

<sup>b</sup> The figure for 1948 includes the South African gold loan (-80 millions) and that for 1949 its repayment (+80 millions).

<sup>c</sup> Including transactions not elsewhere specified.

<sup>d</sup> Since October 1947, most of the Union of South Africa's transactions with the dollar area have been settled directly, without use of the central reserves in London, and are therefore not included in figures subsequent to that date.

Second, the advantage of hard-currency accruals from the colonial territories is not necessarily inseparable from the great disadvantage constituted by the sterling area's demand—without clearly definable limits<sup>1</sup>—which the system imposes on the United Kingdom's own exports. Given that the sterling balances after the war were never reduced through cancellation or partly funded, as had been contemplated in the Anglo-American Financial Agreement of 1946, and have since been greatly increased in the two ways described above, the reserve positions of a number of the overseas members are such as to make them immune to any but the most severe and protracted over-importing. For these countries, no financial necessity is evident, whatever the general circumstances may be, for making cuts in imports of British goods, whether by direct restriction or by general credit and fiscal policy,

<sup>1</sup> The sterling balances, however, are not all equally liquid and available on demand. Considerable amounts are blocked by agreement, or represent long-term investments, or constitute, in the case of the Colonies, the statutory cover for domestic currency issues (established at as much as 110 per cent of currency circulation in most instances).

nor do they feel any direct pressure as far as their own reserves are concerned to curtail imports from other sources except as may be agreed upon in the common interest—sometimes belatedly, as in the present crisis. In other words, the overseas sterling area, while taking since the war a fairly steadily rising volume of the United Kingdom's exports, remains in a stronger position than ever to absorb still more of British production.

The financial position of the overseas sterling countries goes far to explain the paradox that, while holding its imports to austerity levels and raising its export volume by about 85 per cent over 1938, the United Kingdom still finds its international payments position as difficult as ever. Other and even more important, but also less tractable causes are, of course, the great deterioration in the United Kingdom's terms of trade—worse by 38 per cent at the end of 1951 than in 1938—and the reduced purchasing power of its foreign investment income since before the war. The conclusion appears to be warranted that, in maintaining freedom of capital transfers within the sterling area

while making the basic adjustments required in its post-war trade and payments position, the United Kingdom has been endeavouring, with considerable but less than complete success, to carry a double burden, to which is now added that of increased defence outlays at home.

A solution to the problems of the sterling area thus seems likely to require action not merely with respect to its trade with non-member countries, but also with regard to the financial relationships underlying trade within the area, although it must not be overlooked that these relationships are in considerable measure the counterpart of the close political, economic and cultural ties within this group of countries. Measures may be necessary, for instance, to immobilize a part of London balances of overseas sterling countries more firmly than is accomplished by present blocking arrangements. And it is still more difficult to see how the external payments of either the United Kingdom or France can be put on a firmer footing as long as the demand for their exports can be fed by the uninhibited outflow of private funds to the affiliated overseas areas. It is, of course, normal that investment funds should be supplied by the older industrial countries of Europe for economic development abroad, but there is little basis to assume that these capital flows are of that nature. Little, indeed, is generally known about their nature, the evidence of their existence being largely indirect, since they are uncontrolled and unreported. It seems clear, however, that a substantial part of the movement arises from the search for more favourable tax treatment or for safety in the event of war, or even as one stage of a flight into dollars, filtering on through laxer exchange controls in some of the overseas areas. How much of the flow may contribute to sound economic development in the more backward areas is not known, but it seems to be generally accepted that the main recipients of private capital moving out from the United Kingdom have been the Union of South Africa and Australia, countries already well developed in comparison with the poorer regions of the sterling area.<sup>1</sup>

<sup>1</sup> The concentration of capital flow on the independent members of the sterling Commonwealth (not all of which are, of course, equally developed) is also indicated by the fact that the cumulative trade balance (estimated on an f.o.b. basis) of the United Kingdom with these countries as a group for the period 1946-1950 shows a surplus of £350 million, compared with a surplus of only £10 million *vis-à-vis* the dependent territories.

Viewed in a wider perspective, the flow of capital to the more developed areas is but one expression of a long-standing tendency for investment to be concentrated overwhelmingly in countries already industrialized—a tendency greatly strengthened by the present wave of rearmament expenditures. Defence outlays in the leading industrial countries of eastern and western Europe, the Soviet Union and the United States are likely soon to reach levels where they will together equal or even exceed the aggregate national incomes of all the under-developed countries and will be some twenty times the investment financed out of these countries' own domestic savings.<sup>2</sup> The effect of these expenditures will probably be to increase substantially the production capacity of the industrial economies (particularly in the metals and engineering industries) at a time when plans to promote economic development elsewhere are being held back because of competing demands on financial resources and industrial capacity. The most serious implications of this intensified concentration of capital formation are, of course, felt by the under-developed countries themselves, whose populations continue to expand faster than their capacity to produce food and other necessities. But western European countries are also affected, since the present development may accentuate the adverse trend in their terms of trade. The post-war development in these terms of trade has hit an economic system already financially weakened as a result of two wars and inflation; in the sharpened competition for raw materials, Europe was from the first in an unfavourable position. Industrial production in western Europe has expanded greatly compared with pre-war levels, and further increases are projected; but little is being done to redress the balance between industry and agriculture,<sup>3</sup> and, with the important exception of steel, it seems that investment for the purpose of increasing the output of raw materials in western Europe itself or in the overseas primary producing countries is inadequate to provide the basis for rapid industrial progress.

<sup>2</sup> Based on data on national defence programmes as given in the present and in last year's SURVEY and on estimates of national income and net domestic savings as given in *Measures for the Economic Development of Under-developed Countries*, Report by a Group of Experts appointed by the Secretary-General of the United Nations, 1951, page 76.

<sup>3</sup> See Chapter 2, section 1.



## Chapter 2

### DEMAND AND SUPPLY IN EUROPEAN INDUSTRY AND AGRICULTURE

#### 1. INTRODUCTION

In 1951, production in Europe, both agricultural and industrial, continued to expand, but, as in previous years, agriculture lagged behind industry; agricultural production in the area as a whole now exceeds the level reached in the late 'thirties by a few per cent only, whereas industrial production is about 40 per cent higher. The divergence between agriculture and industry, compared with pre-war, is much larger in eastern than in western Europe: industrial production has risen higher in eastern Europe compared with pre-war than in the west, but agricultural production is still below the pre-war level. Agricultural production in western Europe, on the other hand, is some 10 per cent greater than pre-war.<sup>1</sup>

Each year, the rapid expansion of industrial production in eastern Europe brings a steady movement of workers from other occupations to industry. Since industrial workers enjoy higher living standards than the rest of the population, this movement considerably increases the total demand for food, especially the more expensive varieties. By 1951, the increase in this demand and the poor showing of agricultural production combined to produce an acute meat shortage in most countries of eastern Europe. At the same time, troubles arose in the industrial field, particularly in Czechoslovakia, largely because the level of steel and

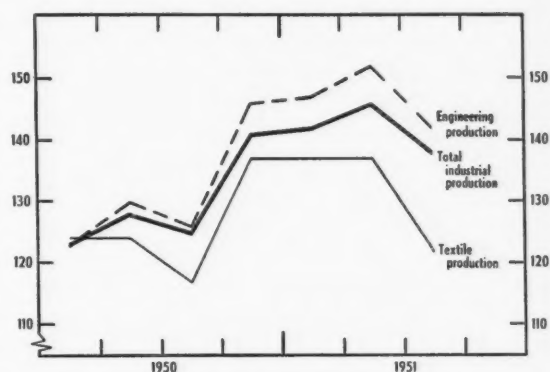
<sup>1</sup> See "Long-term Trends in European Agriculture", in the *Economic Bulletin for Europe*, Vol. 3, No. 2, and Appendix Table VI in this SURVEY. It can be seen from this table that agricultural production in western Europe in the harvest year 1950/51 was 10 per cent above the 1934-38 level. Owing to the somewhat better harvest in 1951 and the continued expansion in livestock production in most countries during the autumn the result for the calendar year 1951 will probably be a little higher.

Although the two series given in the table for agricultural production in eastern European countries cannot be linked together, it is quite clear that agricultural production in 1950 was far below pre-war. As shown in a later section in this chapter, the grain harvest in eastern Europe in 1951 was better than its immediate predecessor, but livestock production declined considerably in most cases. The substantial rise in the output of certain industrial crops in some eastern European countries in 1951 does not vitiate the conclusion that eastern European agricultural production is still well below pre-war.

Chart 2

#### EUROPEAN INDUSTRIAL PRODUCTION

Index numbers — 1948 = 100



Sources: Tables I, II and IV in Appendix A.

coal production could not be raised at a rate corresponding to the high targets fixed for other industries. In general, however, industrial production in eastern Europe still rose considerably during 1951, although somewhat less rapidly than in previous years.

In western Europe, industrial production was affected rather less than expected by raw material shortages—which struck mainly in the field of heavy industry—but it was also mildly braked in the middle of the year by a falling-off in consumer demand.<sup>2</sup> When statistics for the full year are available, the increase in total industrial production in Europe as a whole in 1951 will probably prove to have been some few points less than the 14 per cent recorded in the preceding year.

Both in agriculture and in industry the two parts of Germany, east and west, increased production more than nearly all other countries. In industry, eastern

<sup>2</sup> See section 3 of this chapter and *Economic Bulletin for Europe*, Vol. 3, No. 2, 1951.

and western Germany together provided about one-half the total increase in European industrial production. At the other extreme, the United Kingdom, where raw material shortages were most marked, contributed only one-tenth. France, Belgium and Italy, whose combined output in 1950 was substantially less than the United Kingdom's, contributed twice as much to the increase in 1951. The rates of increase which these countries achieved in the first half of the year (and, as Table 6 shows, largely maintained through the third quarter) emphasize the extent to which they had previously been failing to make full use of their existing industrial resources.

It was not until the third quarter that the recession in consumer demand in western Europe began noticeably to affect production. Even then, in most countries, continued buoyancy in the capital goods field offset the tendency for the rate of increase of consumer production to decline. The exceptions were Denmark and the Netherlands, where deflationary policies introduced as a means of solving their balance-of-payments crises caused a decline in total industrial production during the year. Compared with 1948 levels, engineering production and textile production, as well as total industrial output in Europe, had risen by roughly the same proportions up to the beginning of 1950, but since then, as shown in Chart 2, the lead has definitely been taken by the engineering sector. It also appears that the fall in textile production, but not that in engineering production, during the third quarter of 1951 was much greater than could be accounted for by seasonal influences alone.<sup>1</sup> The information available up to the time of writing shows that only in western Germany, and there only by a few per cent, did the seasonal upturn in the autumn months bring production to a level above that already reached in the spring. In all the other western European countries listed in Table 6, production in the autumn barely reached the spring level, and in three countries, the United Kingdom, the Netherlands and Denmark, it was lower than a year ago.

Table 6 shows how the increases in industrial production in a number of European countries were built up from changes in the supply of labour, on the one hand, and changes in the efficiency of its use, on the other. In the United Kingdom and the Scandinavian countries, industrial production in 1951 rose only

moderately because reserves of manpower were relatively small and because the rate of increase in production per man-year slowed down<sup>2</sup>: these countries were endeavouring to apply increased quantities of labour to capital resources which were already almost fully utilized and, in the case of the United Kingdom, with inadequate supplies of raw materials. It is estimated that, by the third quarter, output per man-year in the United Kingdom was hardly above the corresponding period in the previous year.

In other western European countries, production could expand much more than in northern Europe, partly because there existed larger, and in some cases abundant, manpower reserves, and partly because output per man-year in the period before the Korean war had been at a low level owing to low utilization of the existing stock of industrial capital. In these countries, output per worker seems to have increased in 1951 by about 10 per cent in each case, and in all of them except France and Italy, employment likewise increased substantially. The scant information at present available about working-hours in 1951 does not so far reveal significant changes in western Europe.

In eastern European countries, the increase in employment was considerably greater than in the west. In Poland and Czechoslovakia, employment increased 7 to 8 per cent, and in Hungary and eastern Germany, more than 10 per cent. In western Europe, Switzerland is the only country where such a high rate of increase in employment is recorded.<sup>3</sup> There is no systematic information available about the total number of hours worked in any of the eastern European countries, but indications are that working-hours may well have increased considerably in some cases. The increases in output per man shown in Table 6 are thus probably greater than the increases achieved in output per man-hour. Subject to reservation on this point, it can be seen that the increase in output per man-hour was not greater than in those western European countries where there were still ample reserves of manpower. In Czechoslovakia, where manpower is reported to have been short, the rate of increase of output per man declined significantly from 1950 to 1951 and in the last year did not greatly exceed

<sup>1</sup> It should be noted that the data in Chart 2 are not adjusted for seasonal variations.

<sup>2</sup> In Denmark and the Netherlands it declined in absolute terms because of the recession in total demand and production.

<sup>3</sup> The increment came, not so much from any previous reserves of unemployed, as from an increase in the number of permits granted to foreign workers.

**Table 6**  
**EMPLOYMENT IN INDUSTRY, AVERAGE WORKING HOURS, OUTPUT PER MAN**  
**AND INDUSTRIAL PRODUCTION**  
*Index numbers—corresponding period of previous year = 100*

Country	EMPLOYMENT						AVERAGE HOURS WORKED PER MAN						OUTPUT PER MAN-YEAR <sup>a</sup> OR PER MAN-HOUR						INDUSTRIAL PRODUCTION					
	1949			1950			1951			1949			1950			1951			1949			1950		
	Second half	First half	1949	Second half	First half	1950	Second half	First half	1951	Second half	First half	1949	Second half	First half	1950	Second half	First half	1951	Second half	First half	1949	Second half	First half	1951
United Kingdom . . . . .	102	103	102	102	102	102	102	101	..	105	106	105	105	106	105	102	101	107	109	109	105	105	104	104
Sweden . . . . .	100 <sup>b</sup>	100 <sup>b</sup>	100 <sup>b</sup>	100 <sup>b</sup>	103 <sup>b</sup>	101 <sup>b</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norway . . . . .	103	103	103	103	103	103	..	..	..	105	105	105	105	105	105	102	104	108	108	108	105	105	108	108
Denmark . . . . .	106 <sup>b</sup>	108 <sup>b</sup>	106 <sup>b</sup>	106 <sup>b</sup>	105 <sup>b</sup>	102 <sup>b</sup>	..	..	..	102	104	104	104	104	99	97	108	111	109	109	105	105	98	98
Netherlands . . . . .	105	106	108	106	106	102	..	..	..	107	102	104	104	105	105	93	108	112	109	113	111	111	95	95
Belgium . . . . .	96	98	101	107	107	107	..	..	..	100	97	108	111	108	111	108	108	96	95	110	119	115	115	115
France . . . . .	101	100	101	102	102	103	..	..	..	108	95	103	111	108	111	108	108	108	97	105	115	112	112	112
Italy . . . . .	98	98	100	100	100	..	..	..	..	106	114	114	114	..	..	..	104	112	114	117	117	114	114	114
Switzerland . . . . .	93	94	100	108	112	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Austria . . . . .	111	107	103	104	106	106	101	101	101	114	112	109	109	109	107	107	131	124	114	115	115	115	115	115
Western Germany . . . . .	106	103	108	110	108	..	..	102	..	117	111	120	118	107	107	107	134	120	134	132	132	132	132	132
Eastern Germany . . . . .	..	..	..	..	..	..	..	..	..	120 <sup>c</sup>	114 <sup>d</sup>	114 <sup>d</sup>	109 <sup>d</sup>	111 <sup>d</sup>	111 <sup>d</sup>	111 <sup>d</sup>	120 <sup>c</sup>	126	126	126	123	123	121	121
Poland . . . . .	116 <sup>c</sup>	117	116	107	103	..	..	..	..	106 <sup>c</sup>	107	111	114	116	116	116	123 <sup>c</sup>	125	127	127	122	122	120	120
Czechoslovakia . . . . .	104 <sup>c</sup>	104	112	108	107	..	..	..	..	111 <sup>c</sup>	110	104	104	104	104	104	116 <sup>c</sup>	114	116	113	113	111	111	111
Hungary . . . . .	114 <sup>c</sup>	113	112	112	114	..	..	..	..	125 <sup>c</sup>	120	120	119	119	119	119	142	141	129	133	133	125	125	125

Sources: See "Notes to the Statistics". <sup>a</sup> The figures in italics relate to output per man-year. <sup>b</sup> Total number of hours worked. <sup>c</sup> Twelve months. <sup>d</sup> Nationalized industry only.

that of northern European full-employment countries. As in the United Kingdom, raw material shortages and readjustment of industries to make room for greater production of armaments may have contributed to this phenomenon. Thus the fact that industrial production in eastern Europe increased faster than in western Europe is not necessarily

evidence of any greater speed of technical progress and efficiency in the east, but appears to be attributable partly to the still considerable surplus population in agriculture and partly to the more systematic efforts made to transfer manpower from handicrafts, retail trade, household work and other services into industry.

## 2. AGRICULTURE

### *Supplies of Food and Feeding Stuff in 1951, before the Harvest*

Until the harvest has been brought in, supplies of food and animal feeding stuffs during a calendar year are, of course, determined by the harvest which occurred in the previous calendar year, and by the level and direction of trade in the various products. Table 7 shows that the harvest of 1950 provided Europe as a whole—in the “harvest year”<sup>1</sup> 1950/51—with slightly less grain than in 1949/50; a fractional rise in bread grain supplies being more than outweighed by a fall in those of coarse grain. The potato and sugar beet crops, however, were very much better, the first by 22 million tons, or 20 per cent, and the second by 2.1 million tons, or 30 per cent.

Variations in the climate and varying changes in the level of net imports saw to it that the experience of few countries conformed to these average results. Thus Table 7 shows that in Italy and the other Mediterranean countries, grain production in 1950/51 increased substantially; yet these countries imported little less than in the previous harvest year so that total supplies for consumption or stock-building rose 15 per cent. The experience and behaviour of the other western European countries, taken as a group, was exactly the opposite: in face of a significant drop in their own grain production they reduced their net imports. In western Germany, and possibly some other countries, the fall in bread grain imports may have been due to an improvement in the diet, with consumption shifting from starchy foods to meat and milk products. But undoubtedly the major reason why the non-Mediterranean countries of western Europe were content to allow a drop in their total grain supplies was that they were able to sustain supplies of animal feeding stuffs by substituting potatoes from the abundant crop. By

way of exception, several western European countries in a relatively strong balance-of-payments position—Belgium, Sweden and Switzerland—imported substantially larger quantities of bread grain and raised their total supplies by 15 to 20 per cent during the harvest year 1950/51, no doubt mainly in order to increase stocks in face of the uncertain political situation.

The supply position was also far from uniform during 1950/51 among eastern European countries. In the region as a whole, the 1950 grain harvest was substantially smaller than in 1949, but the fall was concentrated in Yugoslavia, Hungary and Rumania as a consequence of the severe drought which prevailed over much of south-eastern Europe. Potato production in these countries also declined from 1949 to 1950. In the northern part of the region, on the other hand, there was no decline in grain production, and in addition, considerable quantities were imported from the Soviet Union. Moreover, the 1950 harvest of potatoes, of which Poland, Czechoslovakia and eastern Germany are all major producers, averaged some 30 per cent larger in this area than in 1949.

In contrast to the uneven results of the grain and potato harvests, the sugar beet crop in 1950 was excellent in nearly all European countries. Imports by the principal importing countries nevertheless not only failed to decline but even rose moderately during 1950/51 compared with the preceding year. Although consumption doubtless increased, particularly in western Germany and in eastern European countries, there must also have been fairly general and substantial additions to stocks. The increase in total sugar supplies, including both domestic production and net imports, was particularly great in western Germany (65 per cent), Switzerland (55 per cent), and Sweden (40 per cent).

Serious problems arose during 1950/51 in a number of countries with regard to supplies of livestock produce. The difficulties were especially great in

<sup>1</sup> The term “harvest year”, as here employed, extends from July to June and, in the case of staple crops, production figures refer to the harvests at the beginning of the period.



**Table 7**  
**HARVEST RESULTS, TRADE AND SUPPLIES FOR HOME MARKET**  
**OF GRAIN, POTATOES AND SUGAR**  
*Millions of tons*

Country or country group		BREAD GRAIN			COARSE GRAIN			POTATOES	SUGAR		
		Production	Net imports	Supplies for home market	Production	Net imports	Supplies for home market	Production	Production	Net imports	Supplies for home market
France	1949/50	8.7	0.1	8.8	5.0	0.9	5.9	11.5	0.9	0.2	1.1
	1950/51	8.3	-0.8	7.5	5.5	0.5	6.0	14.6	1.4	-0.2	1.2
	1951/52	7.6	..	..	6.1	..	..	13.5	1.3	..	..
Western Germany and Austria	1949/50	6.5	3.5	10.0	5.1	1.9	7.0	22.9	0.7	0.5	1.2
	1950/51	6.4	3.1	9.5	5.2	1.6	6.8	30.5	1.1	0.7	1.8
	1951/52	6.7	..	..	5.9	..	..	26.6	1.2	..	..
Other northern <sup>a</sup> and western Europe	1949/50	7.1	6.8	13.9	14.5	5.3	19.8	25.3	2.0	2.2	4.2
	1950/51	7.1	7.5	14.6	13.4	4.8	18.2	26.1	2.4	2.7	5.1
	1951/52	5.8	..	..	13.5	..	..	23.3	2.1	..	..
Italy	1949/50	7.2	1.1	8.3	2.8	0.1	2.9	2.6	0.5	—	0.5
	1950/51	7.8	1.2	9.0	2.8	0.2	3.0	2.4	0.6	—	0.6
	1951/52	6.9	..	..	3.4	..	..	3.3	0.7	..	..
Other Mediterranean <sup>b</sup> Europe	1949/50	7.7	1.4	9.1	5.7	0.2	5.9	4.2	0.3	0.2	0.5
	1950/51	9.9	0.9	10.8	7.0	—	7.0	4.7	0.3	0.2	0.5
	1951/52	12.8	..	..	8.5	..	..	5.2	0.5	..	..
Total western Europe	1949/50	37.2	12.9	50.1	33.1	8.4	41.5	66.5	4.4	3.1	7.5
	1950/51	39.5	11.9	51.4	33.9	7.1	41.0	78.3	5.8	3.4	9.2
	1951/52	39.8	..	..	37.4	..	..	71.9	5.8	..	..
North-eastern <sup>c</sup> Europe	1949/50	14.3	..	..	7.1	..	..	45.7	2.0	..	..
	1950/51	13.9	..	..	7.4	..	..	58.8	2.7	..	..
	1951/52	14.7*	..	..	8.2*	..	..	53.2*	2.7*	..	..
South-eastern <sup>d</sup> Europe	1949/50	10.0	..	..	14.0	..	..	5.8	0.5	..	..
	1950/51	8.9	..	..	11.1	..	..	3.3	0.5	..	..
	1951/52	10.2*	..	..	15.0*	..	..	5.7	0.6	..	..
Total eastern Europe	1949/50	24.3	..	..	21.1	..	..	51.5	2.5	..	..
	1950/51	22.8	..	..	18.5	..	..	62.1	3.2	..	..
	1951/52	24.9*	..	..	23.2*	..	..	58.9*	3.3*	..	..
Total Europe (excluding U.S.S.R.)	1949/50	61.5	..	..	54.2	..	..	118.0	6.9	..	..
	1950/51	62.3	..	..	52.4	..	..	140.4	9.0	..	..
	1951/52	64.7*	..	..	60.6*	..	..	130.8*	9.1*	..	..

Sources: For western European countries the production data have been furnished by the Food and Agriculture Organization of the United Nations and the trade data are taken from national trade statistics; for eastern European countries, see "Notes to the Statistics".

NOTE. — Net exports (—).

<sup>a</sup> Belgium, Denmark, Finland, Iceland, Ireland, the Netherlands, Norway, Sweden, Switzerland and the United Kingdom.

<sup>b</sup> Greece, Portugal, Spain and Turkey.

<sup>c</sup> Czechoslovakia, eastern Germany and Poland.

<sup>d</sup> Bulgaria, Hungary, Rumania and Yugoslavia.

Table 8

## PRICES PAID TO FARMERS FOR SELECTED AGRICULTURAL PRODUCTS

A. Price paid to farmers during harvest year July 1950 to June 1951, United States dollars per 100 kgs.  
 B. Index of prices paid 1950/51 based on price paid during previous harvest year.  
 C. Index of price fixed for harvest year 1951/52 based on previous harvest year.  
 D. Index of price paid in autumn 1951 based on corresponding period in previous autumn.

	Denmark	Ireland	Netherlands	United Kingdom	Norway	Sweden <sup>a</sup>	Belgium-Luxembourg	France	Western Germany	Austria	Italy	Switzerland	Poland <sup>b</sup>	Czechoslovakia <sup>b</sup>	Hungary <sup>b</sup>	Bulgaria <sup>b</sup>
Wheat . . .	{ A 8.5 B 113 C 90	{ 6.9 100 108	{ 5.9 102 111	{ 7.5 120 104	{ 9.1 118 112	{ 6.0 102 130	{ 8.6 103 108	{ 7.4 104 138	{ 7.8 127 130	{ 6.3 159 145	{ 10.6 99 100	{ 14.6 100 100	{ 26.3 100 100	{ 8.2 100 100	{ 5.1 100 100	{ 8.7 100 100
	{ A 7.5 B 128 C 90	{ 7.1 131 ..	{ 7.4 119 ..	{ 5.8 103 120	{ 6.9 119 110	{ 5.3 122 ..	{ 7.2 120 ..	{ 4.7 90 142	{ 7.3 139 ..	{ .. .. ..	{ 6.8 93 ..	{ 11.4 118 ..	{ 16.8 118 100	{ 5.7 100 100	{ 4.2 100 100	{ 7.0 100 100
	{ A 2.8 B 114 C ..	{ .. .. ..	{ 2.1 114 ..	{ 3.2 97 100	{ 2.8 105 ..	{ 4.7 <sup>c</sup> 112 ..	{ 2.5 80 ..	{ 3.3 79 ..	{ 2.0 78 ..	{ .. .. ..	{ 5.2 149 ..	{ 4.9 92 ..	{ 5.3 109 132	{ 2.8 100 121-169 <sup>d</sup>	{ .. .. ..	{ 8.6 98 69
Cattle live weight	{ A 25.4 B 119 D ..	{ 25.5 101 111	{ 35.5 104 ..	{ 24.7 102 110	{ 28.0 102 ..	{ 31.9 105 109	{ 42.8 98 ..	{ 32.9 121 ..	{ 31.0 108 ..	{ 22.5 130 ..	{ 39.7 85 ..	{ 66.4 99 102	{ 65.1 91 100	{ 88.0 100 100	{ 29.8 100 97	{ .. .. ..
	{ A 42.2 B 101 D 109	{ 47.6 120 113	{ 43.4 106 118	{ 58.3 115 111	{ 43.1 100 107	{ 40.0 112 113	{ 42.0 103 ..	{ 51.4 133 161	{ 57.6 104 107	{ 46.6 142 123	{ 51.3 106 118	{ 76.4 104 110	{ 171.2 109 102	{ 72.0 100 100	{ 49.4 .. 100	{ 55.8 100 106-133 <sup>d</sup>
	{ A 4.9 B 96 D 110	{ 6.0 100 105	{ 4.6 97 116	{ 7.9 104 106	{ 6.3 102 ..	{ 5.8 102 102	{ 6.1 <sup>e</sup> .. ..	{ 6.1 100 113	{ 5.6 96 118	{ 4.7 100 140	{ 5.8 91 104	{ 8.9 100 98	{ 24.9 111 110	{ 8.4 100 100	{ 5.9 .. ..	{ 14.0 100 87
Milk . . .	{ A 43.0 B 99 D 110	{ 45.9 75 120	{ 52.6 95 90	{ 79.4 95 105	{ 56.0 104 137 <sup>f</sup>	{ 51.9 105 107	{ 68.4 84 ..	{ 53.4 103 122	{ 73.6 81 116	{ 39.8 106 ..	{ 76.2 97 112	{ 116.6 92 100	{ 210.0 117 127	{ 82.5 100 100	{ .. .. ..	{ .. .. ..
Eggs . . .	{ A 43.0 B 99 D 110	{ 45.9 75 120	{ 52.6 95 90	{ 79.4 95 105	{ 56.0 104 137 <sup>f</sup>	{ 51.9 105 107	{ 68.4 84 ..	{ 53.4 103 122	{ 73.6 81 116	{ 39.8 106 ..	{ 76.2 97 112	{ 116.6 92 100	{ 210.0 117 127	{ 82.5 100 100	{ .. .. ..	{ .. .. ..

Sources: Food and Agriculture Organization of the United Nations and General Statistical Bulletin, Organization for European Economic Co-operation, for the data on western European countries; those for eastern European countries have been taken directly from national statistics.

<sup>a</sup> The period covered is from 1 October to 30 September.

<sup>b</sup> The official dollar exchange rates used for these countries are particularly out of line with the internal purchasing power of the currencies in question; the dollar prices given in the table cannot be used for inter-country comparisons.

<sup>c</sup> Potatoes for human consumption. Prices of industrial potatoes declined 3 per cent from 1949/50 to 1950/51; in the new harvest year they were raised 19 per cent.

<sup>d</sup> The higher figure refers to the better quality.

<sup>e</sup> Calendar year 1950.

July 1951 based on July 1950.

eastern Europe, not only in Hungary and Yugoslavia, where the very bad harvests of 1950 compelled the slaughtering of a considerable number of cattle and pigs, but even in Poland and Czechoslovakia, where the harvest had been good but livestock numbers decreased. As a result, most eastern European countries experienced extreme irregularity in meat supplies during the harvest year: there was plenty of meat at the beginning and far too little by the end. On the other hand, in most of western Europe, the output of livestock produce increased, but in some countries pig numbers tended to decline and in others, particularly France and Austria, meat prices soared in response to inflationary pressures.

#### *Price Policies and the Fodder-Livestock Balance*

The difficulties which were experienced in the supply of meat are to be explained largely by inconsistencies in Government policies towards the prices of animal products on the one hand and of fodder supplies on the other: both sets of prices are in varying degrees subject to Government determination in nearly all European countries.<sup>1</sup> In some instances, the prices set either for meat or for grain, or both, have been such as to cause the demand for feeding-stuffs to outrun the available supply. As will be seen, this has been a fairly common development, especially in eastern Europe, where the authorities have desired to bring about a rapid increase in livestock output. In other instances, however, the reverse has been true: prices offered for meat have been low in relation to feeding costs, with the result that meat has not been forthcoming in the desired amounts—a problem which has been of some importance in British imports from neighbouring countries.

It may be noted that the general practice of fixing prices in advance for a full year or more<sup>2</sup> although providing a necessary assurance to producers, enhances the difficulty of adjusting price relationships which prove defective, and increases the risk that new

disparities may arise between controlled and uncontrolled prices when those of some, but not all, products are subject to official determination. This risk is particularly serious, of course, during periods of rapid change in the general economic situation, such as occurred during the 1950/51 harvest year: controlled farm prices after the 1950 harvest had been raised only slightly, if at all, in most countries, Governments being eager to hold down the cost of living and to prevent disturbing shifts in income distribution between farmers and other groups of the population. In so far as some agricultural prices were free from control, however, they tended to rise in the general inflationary situation which developed after Korea—for instance, meat prices in France and grain prices in Denmark—and the balance between meat and fodder prices was thus violently disturbed in one direction or the other.<sup>3</sup>

The influence of relative prices of meat and feeding-stuffs is most noticeable in changes in the number of pigs, which have a much shorter production period than cattle.<sup>4</sup> Table 9 gives, for a number of countries, ratios between the prices received by farmers for pigs and prices of some of the principal feeding-stuffs, during each of the last two harvest years (and also for the current year as far as available), together with changes in the pig population during approximately the same periods. Although the composition of pig fodder varies from country to country and, at least in some instances, the prices of maize and skimmed milk should also be taken into account,<sup>5</sup> the picture emerging from the table is clear enough, especially for 1949/50. In countries where the price of pigs was about seven or eight times the price of grain and fifteen or sixteen times the price of potatoes, the pig population remained virtually stationary. Where the relative price for pigs was lower, as in Ireland, the number of pigs declined, but where the ratio was relatively high the number increased. The latter situation was, in the 1949/50 harvest year, by far the more general: in all eastern European countries listed in Table 9, pig prices were fixed at very high levels in relation to prices of feeding-stuffs, and the

<sup>1</sup> Prices of virtually all important agricultural products are fixed by the Government not only in eastern European countries but also in the United Kingdom, Norway and Sweden, and in most other countries Governments influence, directly or indirectly, the prices of at least some of the principal agricultural commodities. Potatoes are, it may be noted, a fairly general and important exception, and their prices are left free to fluctuate in most countries outside of eastern Europe.

<sup>2</sup> Either at sowing time, as in the United Kingdom, or at harvest time, as in France.

<sup>3</sup> See Table 8 for changes in prices paid to farmers since the harvest year 1949/50.

<sup>4</sup> In addition to the index numbers shown in Table 9, cattle and pig numbers are given in absolute terms in Table XIV in Appendix A.

<sup>5</sup> For some countries, barley may be more relevant than oats, but their prices usually move together.

Table 9

RELATIVE PRICES OF PIGS AND FEEDING-STUFFS AND INDEX NUMBERS OF PIG POPULATION

Country	Ratio of price of pigs to the price of oats			Ratio of price of pigs to the price of potatoes			Index numbers of pig population (Previous year = 100)	
	1949/50	1950/51	1951/52	1949/50	1950/51	1951/52	1950	1951
Poland . . . . .	11	10	10	32	32	25	170	..
Western Germany . . . . .	10	8	..	21	29	..	123	126
Netherlands . . . . .	7	6	..	22	21	..	143	103
Czechoslovakia . . . . .	13	13	13	26	26	21	111	94*
Hungary . . . . .	..	12 <sup>a</sup>	12 <sup>a</sup>	..	..	25	125	69
Denmark . . . . .	7	6	7 <sup>b</sup>	17	15	..	117	90
United Kingdom . . . . .	9	10	9	15	18	20	108	136
Norway . . . . .	7	6	6	16	15	..	101	91
Switzerland . . . . .	8	7	..	14	16	..	102	98
Ireland . . . . .	7	7	..	12	..	..	96	85
France . . . . .	7	11 <sup>c</sup>	..	9	16	..	101	104

Sources: The figures are derived from Tables 8 and XIV.

NOTE. — The ratio is calculated by dividing the price paid to farmers per kilogramme of live weight of pigs by the price per kilogramme of oats and potatoes, respectively.

<sup>a</sup> The price ratio between pigs and maize was 11:1 in both 1950/51 and 1951/52.

<sup>b</sup> Calculated on prices for obligatory deliveries. Calculated on free prices the ratio is 4 for oats and 5 for barley.

<sup>c</sup> Calculated from the official price of oats. If based on the higher unofficial, prices ruling in much of the market during the period, the ratio would be much lower.

number of pigs was greatly increased from 1949 to 1950. Similar price relationships (particularly between pigs and potatoes) and similar results may be observed in western Germany and the Netherlands. Pig numbers also rose substantially in Denmark from 1949 to 1950, although the price inducement was not so strong as in the other countries mentioned.

The last harvest year, 1950/51, brought a number of significant changes, not all of which are adequately revealed by the data in Table 9. In the United Kingdom, pig numbers had increased only moderately from 1949 to 1950, perhaps because feeding-stuffs were rationed, although grain prices were relatively favourable for pig production. In 1950/51, the price ratio became still more favourable and, with more feeding-stuffs provided, the number of pigs rose by 36 per cent. Difficulties arose, however, on the side of meat imports, on which the United Kingdom is singularly dependent for its supplies despite increasing domestic production. Prices for bacon imported from Denmark and Ireland were kept on a much lower level than those paid to home producers, while prices of feeding-stuffs in these countries increased. Pig numbers in Ireland thus fell even more sharply than in 1949/50,<sup>1</sup> while in Denmark the previous increase gave way to a decline. In view of these

unfavourable prospects for its future meat supply, the United Kingdom was led to grant, in the spring of 1951, higher prices for bacon imports.

In western Germany, following the increases already attained, the further reconstruction of the livestock population was favoured by the excellent potato harvest of 1950. The ensuing substantial fall in potato prices<sup>2</sup> made conditions extremely favourable and pig numbers expanded by 26 per cent during the year beginning October 1950. This seems to have been more than even the good potato harvest would allow: pigs were being fed on bread grain, and the Government found it necessary to raise grain prices in the spring by 30 per cent. In Switzerland, on the other hand, where the potato harvest was equally good, the Government chose to support potato prices at little less than the level of the previous season. The result was that, in spite of the excellent harvest, the number of pigs did not increase, but even declined

<sup>1</sup> Ireland had planned to more than double its pig-meat production from 1948/49 to 1952/53, the greater part of the increase to be exported to the United Kingdom under a long-term contract negotiated in 1948. So far, however, the increases envisaged in production have not been achieved, and exports to the United Kingdom have remained negligible compared with pre-war levels.

<sup>2</sup> See Table 8.



**Table 10**  
INDEX NUMBERS OF PRODUCTION OF FEEDING-STUFFS AND LIVESTOCK NUMBERS  
IN EASTERN EUROPE

1949 = 100

Country	1950				1951			
	Cattle	Pigs	Coarse grain	Potatoes	Cattle	Pigs	Coarse grain	Potatoes
Eastern Germany . . . . .	113	142	124	154	118	178	161	159
Poland . . . . .	113	170	95	119	105	..	95	..
Czechoslovakia . . . . .	109	111	105	141	109	105*	116	141*
Hungary . . . . .	99	125	84	54	82	87	117	107
Yugoslavia . . . . .	99	104	57	50	90	95	103	83

Sources : Derived from Tables XIII and XIV.

a little, and at the same time the Government had great difficulties in disposing of the redundant potatoes.<sup>1</sup>

In France, though the bread grain harvest was lower, the good harvest of potatoes and coarse grain in 1950 seems to have given rise to undue optimism. Grain exports were increased, while the price of coarse grain was reduced, and potato prices fell by about 20 per cent. In the course of 1951, however, meat prices rose sharply as inflation progressed, a scarcity of feeding-stuffs became clear, coarse grain was traded at black market prices, and prices for the new crop were fixed at levels far above those for the 1950 harvest.

In eastern Europe, much graver difficulties emerged. The exceptionally high ratios of pig to fodder prices were carried forward with little change into the new harvest year 1950/51, but the supply of feeding-stuffs was far from adequate to sustain even the existing level of livestock numbers, following the increases of the previous year. As can be seen from Table 10, Hungary had had 25 per cent more pigs in 1950 than in 1949, but had harvested only about four-fifths as much coarse grain and little more than half as many potatoes; the grass harvest had also been bad. In Poland, though the 1950 crops had been far better than in Hungary, the disparity was no less serious with 13 per cent more cattle and 70 per cent more pigs to be fed by a somewhat lower grain harvest

and only 20 per cent more potatoes. The problems experienced in Czechoslovakia are less clear from the data on domestic crop production and livestock numbers, since the country is dependent on imports for a substantial part of its grain supplies, but it was only in eastern Germany that the fodder basis, including imports from the Soviet Union and other sources,<sup>2</sup> was sufficiently good not merely to maintain but to increase livestock numbers still further. Concurrent with this growth in livestock, meat supplies in eastern Germany increased by some 30 per cent in the first nine months of 1951 compared with the same period of the previous year, although the level of consumption remained only about half as high as before the war. Meat supplies in Hungary and Poland were also increased temporarily, but only as the result of excessive slaughtering rendered necessary by the shortage of feeding-stuffs.<sup>3</sup> Thus, in the third quarter of 1950, an

<sup>2</sup> Published sources indicate that the Soviet Union exported, during the 1950/51 harvest season, 755,000 tons of bread grain and 308,000 tons of coarse grain to Czechoslovakia and, during the first eight months of 1950, 225,000 tons of bread grain and 220,000 tons of coarse grain to eastern Germany. Shipments from the Soviet Union to eastern Germany are known to have increased considerably later, and grain was also supplied to it by other eastern European countries, but no information has been published on the amounts of these deliveries.

<sup>3</sup> Both in the countries concerned and elsewhere, the heavy slaughtering of livestock has sometimes been explained as reflecting apprehensions of the peasantry regarding collectivization, despite official reassurances given to them on this score. On the face of it, however, peasants would scarcely be expected to destroy their capital as long as collectivization remains largely potential rather than actual, nor does the explanation appear to be consistent with the rise in the number of milch cows in Poland, which is reported to have increased although cattle of all kinds have fallen in number.

<sup>1</sup> At least part of the solution was found by stocking surplus potatoes under a Government programme to provide for alcohol production in the event of war, while the domestic price policy was supported by a rigid ban on potato imports.

**Table 11**  
**PRODUCTION, TRADE AND SUPPLIES FOR THE HOME MARKET OF MEAT<sup>a</sup> AND MILK**  
**AND MILK PRODUCTS<sup>b</sup> IN THE HARVEST YEAR 1950/51**

*Thousands of tons and index numbers*

Country and commodity		PRODUCTION	IMPORTS <sup>b</sup>	EXPORTS <sup>b</sup>	SUPPLIES FOR HOME MARKET <sup>c</sup>	Index numbers — 1949/50 = 100		
						PRODUCTION	NET TRADE <sup>b</sup> (Net imports—I) (Net exports—E)	SUPPLIES FOR HOME MARKET <sup>c</sup>
Denmark	Meat . .	619	—	363	256	118	154 E	88
	Milk . .	5,412	—	3,826	1,586	103	105 E	101
Ireland	Meat . .	369	—	150	219	111	108 E	109
	Milk . .	2,430	99	103	2,426	104	6 E	107
Netherlands	Meat . .	380	30	61	349	119	150 E	117
	Milk . .	5,820	20	2,657	3,183	103	120 E	92
United Kingdom	Meat . .	1,260	1,094	5	2,349	107	72 I	87
	Milk . .	10,430	8,636	48	19,018	103	93 I	98
Norway	Meat . .	116	—	—	116	103	—	103
	Milk . .	1,640	—	103	1,537	103	452 E	98
Sweden	Meat . .	314	24	2	336	101	91 I	100
	Milk . .	5,090	18	427	4,681	104	157 E	101
Belgium- Luxembourg	Meat . .	367	20	11	376	110	58 I	108
	Milk . .	3,390	900	15	4,275	105	108 I	106
France	Meat . .	2,460	31	51	2,440	99	79 E	97
	Milk . .	15,830	496	243	16,083	105	39 I	103
Western Germany	Meat . .	1,680	217	15	1,882	116	153 I	119
	Milk . .	15,210	1,235	200	16,245	112	119 I	112
Austria	Meat . .	244	23	3	264	125	36 I	106
	Milk . .	2,088	30	9	2,109	108	210 I	108
Italy	Meat . .	821	59	—	880	105	311 I	110
	Milk . .	7,300	376	161	7,515	101	152 I	102
Switzerland	Meat . .	187	22	1	208	98	189 I	103
	Milk . .	2,622	138	170	2,590	106	<sup>d</sup>	101
Greece	Meat . .	77	18	—	95	103	67 I	93
	Milk . .	580	92	—	672	99	93 I	98
Finland	Meat . .	122	—	—	122	105	—	109
	Milk . .	2,500	—	85	2,415	109	<sup>e</sup>	105
Total of countries listed	Meat . .	9,016	1,538	662	9,892	107	62 I	101
	Milk . .	80,342	12,040	8,047	84,335	105	70 I	103
Czechoslovakia	Milk . .	3,000 <sup>f</sup>	..	..	..	115 <sup>g</sup>	..	..
Eastern								
Germany	Milk . .	3,440 <sup>f</sup>	..	..	..	126 <sup>g</sup>	..	..
Poland	Milk . .	7,760 <sup>f</sup>	..	..	..	110* <sup>g</sup>	..	..
Yugoslavia	Milk . .	2,060	..	..	..	87	..	..

Sources: See "Notes to the Statistics".

NOTE. — The harvest year represents the period from 1 July to 30 June, unless otherwise stated.

<sup>a</sup> The data on production are expressed in terms of carcass weight and include poultry, game and offal; those on trade include live animals in meat equivalent and also, where significant, poultry, game and tinned meat of all kinds.

<sup>b</sup> In liquid milk equivalent. In western European countries the home production figures relate to total production of liquid milk for all purposes

and include goats' milk as well; in eastern European countries, goats' milk is excluded. The foreign trade figures relate to the fresh milk content of trade in butter, cheese and dried and condensed milk.

<sup>c</sup> Including milk used for butter and cheese production for the home market.

<sup>d</sup> Change from net imports to net exports.

<sup>e</sup> Exports in 1949/50 were negligible.

<sup>f</sup> Calendar year 1950.

<sup>g</sup> January-June 1951 — corresponding period of 1950 = 100.

increase in meat production of 64 per cent over the previous year's level was reported in Hungary, but by February 1951 the number of cattle had been reduced considerably and the number of pigs by not less than 2 million since May 1950. In Poland, meat supplies had increased by about 45 per cent in the course of 1950, but a great number of sows had to be slaughtered during the following winter. In both countries, these decreases in livestock numbers led to serious meat shortages in the course of 1951.

Though the United Kingdom was an important exception, most western countries increased the supply of meat for their home markets in 1950/51, as indicated by Table 11.<sup>1</sup> The increase was, in most instances, less than the rise in domestic meat production, and exporting countries exported more while a number of importing countries imported less than in the preceding year. This was not true, however, of western Germany, whose imports of meat during the harvest year as a whole, despite a reduction in early 1951, were much greater than in 1949/50, and Italy and Switzerland also derived a somewhat greater part of their consumption from imports. The United Kingdom, too, increased its meat imports from European countries by more than 25 per cent during 1950/51, but neither this nor the large increase in its domestic production was enough to compensate for the almost complete cessation of imports from Argentina and the considerable decline in those from other overseas countries:

*Meat Imports by the United Kingdom<sup>a</sup>*

Source	(Thousands of tons)	
	1949/50 July-June	1950/51 July-June
European countries . . . . .	346	431
Argentina . . . . .	408	74
Other overseas countries . .	706	441
Unspecified . . . . .	69	148
Total . . . . .	1,529	1,094

<sup>a</sup> Including live animals expressed in meat equivalent.

On the whole, the demand for meat in intra-European trade was sufficiently strong during 1950/51 for the reduction of imports by western Germany in the latter part of the harvest year to have no depressing effects on the market.

<sup>1</sup> The data in the table represent only apparent consumption (that is, production plus net imports or minus net exports), but changes in meat stocks are presumably of minor importance outside the United Kingdom.

The market for milk products developed quite differently. Milk production rose in nearly all countries as a result of increases both in the number of cows and in yields. Even in Poland the number of milch cows increased despite the drop in the total number of cattle, although in Hungary and Yugoslavia the cattle slaughtered included milch cows, and milk production declined. On the other hand, the demand for milk and milk products proved less buoyant than that for meat in most countries. Although milk prices, which are Government-controlled in most countries, were not much higher in 1950/51 than in the previous harvest year and in some countries were even lower, Norway, Finland, France and Switzerland reduced imports of milk products and all of them except France also increased exports; Sweden doubled its exports of butter. Although Italy and western Germany took considerably greater quantities than in the previous harvest year, and although Belgium also increased imports somewhat, in western Europe marketing difficulties<sup>2</sup> began to appear. An alternative outlet existed in the United Kingdom, where butter and cheese are still rationed, but not a very attractive one because of the much lower prices offered there than in continental markets. The biggest butter exporter, Denmark, therefore preferred to improve its bargaining position by suspending butter rationing: as a result, butter consumption on the home market increased strongly,<sup>3</sup> whereas exports rose by only 3 per cent. The other big European exporter of butter, the Netherlands, on the other hand, sharply reduced home consumption by cutting subsidies on home market sales, and butter exports increased by nearly 20 per cent.

In spite of the growing marketing difficulties for milk and milk products, milk prices have now been raised for the new harvest year 1951/52 in a number of countries. In most cases, however, the rises were less than those for other agricultural products, as can be seen from Table 8. Switzerland seems to provide the only case where the Government has tried to avoid a reduction in demand by lowering the milk price a little. Sweden and the United Kingdom, however, have started a new price policy designed to encourage

<sup>2</sup> They became particularly serious in the case of cheese because imports into the United States market were subjected to drastic new restrictions in July 1951.

<sup>3</sup> In the autumn of 1951, it was 70 per cent above the level of the previous year.

beef rather than milk production. In a great number of countries, among them western Germany, France and Italy, the need for more positive measures to improve and promote the distribution of milk is becoming urgent, since otherwise more efficient production and higher milk yields will have only a disruptive influence on the market which will, in turn, react on production.<sup>1</sup>

#### *The Situation after the New Harvest*

For Europe as a whole the grain harvest of 1951 was better than in 1950. Production of coarse grain in particular was larger by about 8 million tons and that of bread grain by 2 millions. The potato harvest, on the other hand, was 10 million tons smaller, and the production of sugar beet showed little change.

Harvest results again varied considerably from country to country. This was especially true of bread grain, where the increase was largely concentrated in Mediterranean and eastern Europe. In three western European countries—France, the United Kingdom and Sweden—the bread grain harvest fell, on the other hand, by 1.6 million tons, owing partly to weather conditions and partly to a reduction of the area sown to wheat. While the area under sugar beet, oilseeds and grass has been increasing over a number of years, the area under wheat and rye has, in several western European countries, shown a tendency to contract because Governments have been eager to keep bread prices low in order to keep down the cost of living. On present trends, the policy may prove to be self-defeating.

#### *Index of Area under Bread Grain in Selected European Countries* (1934-1938 = 100)

Country	1950	1951
France <sup>a</sup> . . . . .	83	81
Ireland <sup>a</sup> . . . . .	190	146
Netherlands <sup>a</sup> . . . . .	64	53
United Kingdom <sup>a</sup> . . . . .	133	115
Denmark <sup>b</sup> . . . . .	88	73
Sweden <sup>b</sup> . . . . .	93	85
Western Germany <sup>b</sup> . . . . .	85	83
Italy <sup>a</sup> . . . . .	94	94

<sup>a</sup> Wheat.

<sup>b</sup> Wheat and rye.

Coarse grain crops were, in general, larger than in 1950, and barley and oats increased considerably,

<sup>1</sup> Thus it is reported that in France, after the increase of 13 per cent in milk prices in the autumn of 1951, milk is often sold below the official price.

particularly in western and eastern Germany and in Austria. Although the area under maize increased very little, Italy, France and the Balkan countries harvested considerably more than in the previous season.

The area under potatoes in western Europe has been declining since 1948 with the gradual disappearance of the need for a relatively high potato consumption, which was a feature of war and early post-war years. This trend continued in 1951, and with a fairly general fall in yields both in eastern and in western Europe, output averaged about 7 per cent below the 1950 level.

Owing to the great reductions in the harvest of bread grain in the whole of northern and western Europe and in Italy, the net demand of these countries for imported bread grain may well be some 2 million tons or about 20 per cent higher than in the harvest year 1950/51. Turkey, on the other hand, is planning to increase grain exports. The Soviet Union has also reported considerable surpluses available for export,<sup>2</sup> which could probably cover the extra demand of the northern and western regions of Europe, if the difficulties of finding suitable goods in exchange could be overcome.

Although coarse grain production was larger in 1951 than in 1950 in nearly all countries of Europe, the great reductions in the potato harvest, the decline in the quantities of rye available for fodder and the increase in the number of pigs may raise the demand for imports of coarse grains. The decline in the sugar harvest in some of the sugar importing countries will also tend to increase demand for imported sugar, perhaps by about 250,000 tons or some 10 per cent. Because of decreases in production, the grain surpluses of Australia and Argentina and the sterling area's cane sugar surplus are likely to be greatly reduced: western Europe may therefore be still more dependent on imports of agricultural products from the dollar area than in the 1950/51 harvest year. Owing to lack of dollars and other urgent demands for the sums available, some western European countries may not be able to cover their need of feeding-stuffs fully, and eventually livestock numbers may have to be reduced in some countries.

<sup>2</sup> See *Economic Bulletin for Europe*, Vol. 3, No. 2, page 56. Poland and Hungary have also indicated that, under mutually agreeable trading arrangements, they would be able to supply some grain to western Europe, but eastern Europe as a whole (excluding the Soviet Union) is now a net grain deficit area, Czechoslovakia and eastern Germany having substantial import requirements.



In the whole northern and western European region, where the harvest has been inadequate, a renewed upward pressure on agricultural prices and, as a result, a further increase in the cost of living, are to be feared. As can be seen from Table 8, grain prices have been raised considerably in nearly all countries in the region, and potato prices, which were low last year owing to the abundant harvest, can now be expected to increase strongly, particularly if grain imports are kept at a low level in order to save dollars. Milk and, still more, meat prices are steadily increasing in most countries,<sup>1</sup> and the price relation between grain and animal products may again become distorted. In Austria, for instance, grain prices were raised considerably under the Fifth Wage and Price Agreement in the summer of 1951. Prices of wheat and rye were raised by 45 and 60 per cent respectively, to 195 and 175 schillings per quintal, with a premium for early delivery bringing the prices to 210 schillings for wheat and 190 schillings for rye. However, in spite of a price stop, the average price of pigs increased by more than 20 per cent; the value of grain used as fodder for pigs is now about 220 schillings a quintal, and the incentive to deliver grain has again disappeared. In Denmark, where grain prices last year in-

creased considerably, prices for compulsory deliveries have this year been fixed about 10 per cent below last year's level. The price ratio has therefore again become favourable for bacon production, since export prices for bacon have been increased by 9 per cent. The bad prospect for grain imports owing to the dollar shortage has, however, raised free prices for oats exempted from obligatory delivery by 45 per cent and free barley prices by 30 per cent.

Except in Yugoslavia, which in November 1951 changed to a system of completely free agricultural prices, eastern European countries have made only moderate changes in prices paid to farmers for the new harvest year. In Poland and Czechoslovakia, where the potato harvest was very bad, potato prices have now been raised by 30 and 20 per cent respectively, but pig prices are still high in Poland in relation to prices of feeding-stuffs in general, and also in Czechoslovakia in relation to coarse grain and lower quality potatoes. In spite of increases in supplies of coarse grain, the bad potato situation makes the fodder outlook in the northern area of eastern Europe worse rather than better than a year ago; in the southern countries of the region the fodder balance has improved considerably.

### 3. LIGHT INDUSTRY

#### *Divergent Production Trends*

The impetus given by the Korean war to production in the light industries, as well as the recession which later developed during 1951, was of widely varying importance in different European countries. Developments since the beginning of 1950 in fifteen European countries are traced in Table 12, giving production indices for two industries producing primarily consumer goods—that is, the textile industry and the leather and shoe industry—and also for the paper and printing industry, the output of which is more mixed as between goods for popular consumption and products required by industry itself.

Among the western European countries listed in the tables, three groups may be distinguished with broadly similar patterns of behaviour within each group. The United Kingdom, Sweden and Norway show the most stable development over the period :

capacity was already more or less fully employed and, save in a few instances, the rate of increase in production does not seem to have been greatly affected by the outbreak of the war in Korea, nor was there much of a setback in production in the spring or summer of 1951. Two other countries, Denmark and the Netherlands, were like those of the first group in that the trend of production in light industry was not, on the whole, sharply influenced in the second half of 1950 by the Korean war, but in the course of 1951 their consumer goods industries experienced a serious recession as a result of the deflationary measures which the Governments of these two countries took to improve their balance-of-payments situation. In the third group of countries, the consumer goods industries of Belgium, France, Italy and western Germany exhibited far greater sensitiveness to changes in the economic climate : the push given by the start of the Korean war to activity in these sectors was strong, though proving, in most instances, to be of short duration. It was a speculative boom, resulting in accumulations of stocks

<sup>1</sup> In the Netherlands, the increase as far as fresh milk is concerned will be covered by increased subsidies to home consumption.



**Table 12**  
**INDEX NUMBERS OF PRODUCTION IN SELECTED LIGHT INDUSTRIES**

*Corresponding period of previous year = 100*

Industry	Period	United Kingdom	Sweden	Norway	Denmark	Netherlands	Belgium	France	Italy
Textiles . . . . .	1950 First half . .	111	95	107	118	114	111	104	98
	Second half . .	108	100	108	110	110	126	111	111
	1951 First quarter .	104	107	109	105	109	119	108	119
	Second quarter .	104	107	116	88	107	125	109	116
	Third quarter .	102	103	113	79	95	89	107	103
Leather and shoes .	1950 First half . .	109	95	103	115	113	106	116	..
	Second half . .	110	99	106	110	114	114	111	..
	1951 First quarter .	98	100	107	104	114	119	117	109
	Second quarter .	96	100	104	104	108	102	102	89
	Third quarter .	87	89	101	93	90	77	86	95
Paper and printing.	1950 First half . .	124	106	106	105	111	111	105	117
	Second half . .	115	113	109	106	124	118	126	116
	1951 First quarter .	98	108	101	106	125	123	121	116
	Second quarter .	96	113	110	101	120	113	121	113
	Third quarter .	98	105	113	97	115	109	118	105

Industry	Period	Austria	Western Germany	Eastern Germany	Poland	Czechoslovakia	Hungary	Yugoslavia
Textiles . . . . .	1950 First half . .	134	136	144	117	113	117	91
	Second half . .	114	126	144	109	105	116	98
	1951 First quarter .	109	125	121	107	..	113	116
	Second quarter .	117	124	126	113	..	130	86
	Third quarter .	124	109	119	..	..	110	92
Leather and shoes .	1950 First half . .	110	110	139	104	104	176	107
	Second half . .	106	118	139	100	94	118	113
	1951 First quarter .	107	137	122	..	..	145	..
	Second quarter .	116	103	131	117	..	138	..
	Third quarter .	118	84	..	144	..	120	..
Paper and printing.	1950 First half . .	113	123	121	114	105	..	106
	Second half . .	112	131	121	106	109	..	125
	1951 First quarter .	108	119	100	111	104	..	132
	Second quarter .	113	121	114	115	104	..	126
	Third quarter .	109	111	112	114	..	..	105

NOTE. — For sources and definitions of the industry groups, see "Notes to the Statistics".

by business and by the more well-to-do consumers, but in the absence of a major increase in real earnings the spending spree was soon followed by a reaction. In the third quarter of 1951, production in the consumer goods industries in these countries was lower than last year in some branches; in nearly all others

the rate of increase of production was lower than before the outbreak of war in Korea.<sup>1</sup>

<sup>1</sup> Production data through the third quarter do not adequately reveal in all cases the extent of the setback experienced. Thus, indications are that, in France, the situation of the consumer goods industries became still more difficult towards the end of

In nearly all countries of western Europe, the market was most depressed in the leather and shoe industries and least so in the paper industry, the textile industry occupying an intermediate position. The more favourable development in the paper industry is clearly reflected in the behaviour of prices for pulp and paper. Whereas prices of hides, cotton and wool started to decline in the early spring, pulp and paper prices continued to increase throughout the year.

In eastern European countries, the rate of expansion in light industries over the last two years taken as a whole was broadly the same as in western Europe. The rate of increase in eastern German production was considerably higher than in other eastern European countries and nearly the same as in western Germany, apart from the demand crisis in western Germany in the spring and summer of 1951. Although the demand-induced expansion in western European production after Korea and the subsequent decline in 1951 have no parallel in eastern Europe, the rate of increase of production from quarter to quarter is extremely irregular in eastern European countries, as shown by the figures in Table 12. This irregularity seems to stem largely from problems in the supply of raw materials.

#### *Raw Material Supplies in Eastern Europe*

In eastern as well as western Europe, the conditions of production in the consumer goods industries have been heavily influenced by changes in the raw materials position, but the problems are quite different in the two areas. In the whole of eastern Europe, production of consumer goods appears to reflect the higher priority given to heavy industry, especially under the recently revised plans, with respect to imported raw materials, and the consumption goods sector operates more on a hand-to-mouth basis. In the case of leather, home supplies are also important in all the eastern European countries, and fluctuations in the output of shoes and other leather goods may be due in part to the delayed effects of irregular livestock slaughtering discussed in section 2 of this chapter. In the case of textile fibres, home-grown cotton in south-eastern Europe is providing an increasing share of supplies

the year, while in Austria, which stands out as something of an exception in Table 12, the Fifth Wage and Price Agreement in July gave a temporary stimulus to textile and shoe production, but later in the year a sales crisis developed in these two industries. Reports are also current of considerable difficulties in the consumer goods branches in Greece and Turkey.

for the textile industry, but the dependence on imported materials is still very great. In Hungary, for instance, domestic cotton production in 1950 equalled about 5 per cent of the pre-war volume of imports, and in 1951 the area devoted to this crop was increased fivefold.

Poland seems to have been the most successful of the eastern European countries in maintaining its overseas supplies of cotton, wool and leather, owing to its relatively favourable international trade position as a major coal exporter. In eastern Germany, there was also some increase in imports of cotton, wool and leather, mainly from the Soviet Union, and production showed an improvement in quality as well as in quantity; production of cotton cloth, for instance, rose more than total cloth output, including that derived from substitute materials, and the expansion in the production of leather shoes in particular was greater than that in total shoe production. Czechoslovakia, whose consumer goods industries are the most important in eastern Europe, has further shifted the emphasis away from this sector in planning its production and foreign trade; there is no indication of any significant increase in consumer goods output during 1951, although the targets (lower under the revised plan than under the original plan) are reported to have been surpassed.<sup>1</sup>

#### *The Supply of Textile Raw Materials in Western Europe.*

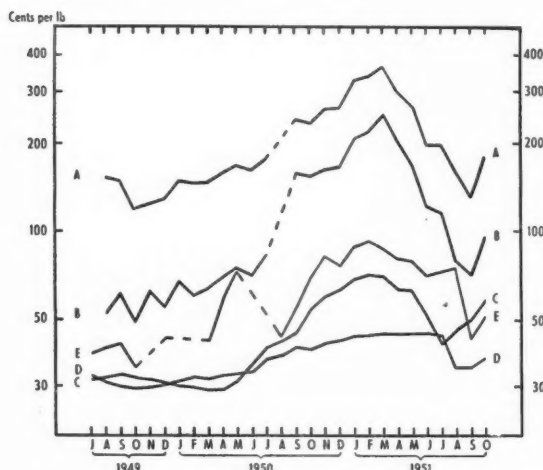
In western European countries, changes in the raw materials supply have been reflected in erratic and sometimes violent price movements, including significant spreads between the prices of materials from dollar and non-dollar sources. In textiles, the sharp break in cotton and wool prices in March was the outstanding event of 1951 and the harbinger of the textile crisis which developed later in the year.

<sup>1</sup> Information about particular consumer goods industries is given only in terms of percentage fulfilment of targets but not in absolute terms. Publication of the general index of textile production has been discontinued since the beginning of 1951. The partial data announced indicate that the output of artificial silk goods increased by 13 or 14 per cent during the April-October period of 1951 and that of linen and hemp cloth by 11 per cent in the third quarter of the year over the corresponding period of 1950 (results for other quarters not being given), but no data are available on production by the relatively more important cotton and wool branches of the industry.

In the shoe industry, some increase in production has occurred during 1951, mainly in the output of work-shoes and light sandals, but the general index of production for this industry has also been discontinued.

**Chart 3**  
**PRICES OF RAW COTTON AND WOOL**  
**AND RAYON STAPLE FIBRES**

*Logarithmic scale*



Sources : *Foreign Crops and Markets*, United States Department of Agriculture.

- |                              |                     |
|------------------------------|---------------------|
| A. Dominion Wool 64's        | C. Brazilian Cotton |
| B. Dominion Wool 48's        | D. American Cotton  |
| E. Egyptian Ashmouini Cotton |                     |

Cotton prices had soared under the combined influence of the low cotton harvest in the United States in 1950 and the speculative increase in demand after Korea. Since exports of American cotton were restricted by an allocation system (combined with a price ceiling), demand was directed to alternative sources. Prices on these markets rose drastically, Latin American and Egyptian cotton reaching a level 50 to 100 per cent above United States cotton (Chart 3). In the spring, however, it became clear that the cotton harvest in 1951 would be much better than in 1950, and at the same time demand started to fall off. Cotton prices therefore turned abruptly downwards, although the Egyptian Government managed to support quotations at a high level until August, and prices in the United States did not fall back from the official ceilings until July. In the autumn it became clear that the United States cotton crop, although still from 55 to 60 per cent greater than in 1950, would be somewhat smaller than had appeared likely earlier in the season,<sup>1</sup> and this, together with the Anglo-Egyptian crisis and some

<sup>1</sup> The latest estimate (beginning of December) for the United States crop is put at 3.4 million tons, compared with an earlier estimate of 3.8 million tons.

holding back of cotton by American farmers, raised prices a little but without materially altering the situation.<sup>2</sup> The world cotton crop in 1951/52 (not including the Soviet Union, China and eastern Europe) is estimated at a total of about 6.1 million tons, or some 28 per cent above the preceding crop, the increase outside the United States being negligible (Table 13). This is still only about equal to consumption in 1950/51, which was maintained by reducing stocks by one-third, and the world supply, including carry-over, in the new season will be no greater than in the last despite the increase in 1951/52 crops.

World production of wool has increased slowly but steadily since 1947/48. Total supplies, however, contracted drastically over this period as a result of the depletion and ultimately the near exhaustion of the huge stocks accumulated during the war. The buying spree after Korea and American purchases for stockpiling<sup>3</sup> sent wool prices soaring and by February and March 1951 they had risen more than cotton prices. Since then, growing resistance to high prices, most strongly expressed in a sudden change in United States Government policy from stockpiling to a complete discontinuation of purchases at the wool auctions, caused a heavy drop in wool prices during the spring and summer of 1951. The resistance to high wool prices was also felt in Europe, and consumption shifted from wool to other materials. As shown in Table 14, production and foreign trade developed less favourably in wool products than in cotton and less favourably in cotton products than in rayon, which had increased much less in price. Furthermore, the wool industry increased the content of materials other than virgin wool (rags and artificial fibres) in its production. Consumption of virgin wool in the wool industry of six major textile-producing countries of Europe<sup>4</sup> declined by 17 per cent from the first nine months of 1950 to the corresponding period of 1951, while the consumption of other materials increased by 20 per cent.<sup>5</sup> In the United States, the

<sup>2</sup> At the end of the year, after the period covered in Chart 3, cotton prices weakened again, and the premium paid for American type Brazilian cotton disappeared.

<sup>3</sup> In October 1950 Congress authorized the purchases of 45,000 tons of wool for the strategic reserve. By March 1951 the stockpiling authority had bought 29,000 tons.

<sup>4</sup> The United Kingdom, France, Italy, western Germany, Belgium and the Netherlands.

<sup>5</sup> The share of virgin wool in total raw materials consumption by the wool industry of these countries thus fell from 67 to 58 per cent (virgin wool calculated at clean weight and other materials at actual weight).

Table 13

WORLD PRODUCTION AND CONSUMPTION OF RAW COTTON AND WOOL

Millions of tons

	COTTON			WOOL <sup>a</sup>		
	1949/50	1950/51	1951/52	1949/50	1950/51	1951/52 (Index numbers 1950/51 = 100)
World production <sup>b</sup> . . . . .	5.86	4.75	6.09	0.90	0.93	102
of which : United States . . . . .	3.51	2.17	3.42	0.07	0.06	102
Rest of World <sup>b</sup> . . . . .	2.35	2.58	2.67	0.83	0.87	102
World consumption <sup>c</sup> . . . . .	5.42	5.94	..	1.01	1.10	82 <sup>d e</sup>
of which : United States <sup>c</sup> . . . . .	1.95	2.31	2.22	0.23	0.29	81 <sup>e</sup>
Western Europe <sup>c</sup> . . . . .	1.54	1.65	..	0.57	0.60	83 <sup>e f</sup>
Rest of world <sup>c</sup> . . . . .	1.93	1.98	..	0.21	0.21	..
Change in world stocks . . . . .	+0.44	-1.19	..	-0.15	-0.10	..
World stocks at beginning of season . .	2.87	3.31	2.12	0.87	0.72	86

Sources and methods : See "Notes to the Statistics".

NOTE. — The years are 1 August to 31 July for cotton and 1 July to 31 June for wool.

<sup>a</sup> Clean basis.

<sup>b</sup> Excluding China, the U.S.S.R. and eastern Europe for cotton, and the U.S.S.R. and eastern Europe for wool.

<sup>c</sup> Consumption figures for wool refer to calendar years — namely, the first year indicated. For both cotton and wool, "Rest of World" consumption includes consumption of imported fibre in the U.S.S.R. and eastern Europe

(also China in the case of cotton), but excludes consumption of these countries' domestic production.

<sup>d</sup> Based on consumption in the United States, the United Kingdom, Belgium, France, Italy, western Germany and the Netherlands, which accounted for about three-quarters of total consumption in 1950.

<sup>e</sup> Index numbers showing consumption in the first three quarters of 1951 compared with the first three quarters of 1950. For the group of seven countries mentioned in <sup>d</sup> above, the index in each quarter of 1951 (corresponding quarter of 1950 = 100) was 88, 87 and 72.

<sup>f</sup> Six European countries mentioned in <sup>d</sup> above, which accounted for about 85 per cent of total western European consumption in 1950.

Table 14

PRODUCTION AND TRADE IN WOOL YARN, COTTON YARN AND RAYON <sup>a</sup>  
IN TEN WESTERN EUROPEAN COUNTRIES <sup>b</sup>

Thousands of tons and index numbers

	Quantities			Index numbers— corresponding period of previous year = 100	
	1949	1950	1951 First half (annual rate)	1950	1951 First half
<b>Wool yarn</b>					
Production . . . . .	599	647	661	108	103
Imports . . . . .	21	34	28	162	81
Exports . . . . .	43	59	54	137	95
Supplies for home market . . . . .	577	622	635	108	103
<b>Cotton yarn</b>					
Production . . . . .	1,220	1,339	1,448	110	108
Imports . . . . .	37	55	63	149	101
Exports . . . . .	108	94	105	87	105
Supplies for home market . . . . .	1,149	1,300	1,406	113	108
<b>Rayon <sup>a</sup></b>					
Production . . . . .	504	629	723	125	121

Sources : See "Notes to the Statistics".

<sup>a</sup> Rayon filament yarn and staple fibre.

<sup>b</sup> The data on wool and cotton yarn relate to Austria, Belgium, France, western Germany, Italy, the Netherlands, Sweden, Switzerland (cotton yarn only), and the United Kingdom; those on rayon to the above countries, excluding Sweden and Switzerland and including Spain.



shift was smaller : the consumption of virgin wool declined by 19 per cent and that of other materials by 3 per cent. The smaller shift appears to be due to the fact that, in the United States, about 50 per cent of the consumption of wool of apparel type is for military purposes, and the elasticity of demand with respect to price seems to be much less in the military than in the civilian sector. Only lately has the United States Army Quartermaster started to order mixed fabrics. Reports in the commercial Press also indicate that considerable progress has recently been made in the United States in the development of new fibres to substitute for wool.

In Europe, the resistance of importers to the high price of wool had started already in 1950. Despite the general increase in the consumption of virgin wool in Europe between 1949 and 1950, imports declined by 6 per cent. In 1951 there was a further decline in imports of roughly 25 per cent through the first three quarters of the year compared with the same period of 1950. Stocks of raw wool in the consuming countries have, in consequence, declined continuously. This, however, is true only for Europe as a whole : some countries, notably Belgium and Switzerland, followed a different import policy during 1950 and increased their stocks, but in 1951 these countries also reduced imports.

At the opening of the new season in September and October, stocks were much lower in importing countries than in other recent years, while stocks had started to accumulate in the exporting countries, where production was, moreover, slightly above last year's level. Sharp fluctuations in raw wool values in October again made private buyers hesitant, and, in spite of the decision of the United Kingdom to stockpile about 18,000 tons of raw wool, prices have recently tended to remain relatively stable at the same low level as at the end of the 1949/50 season or, in terms of dollars, only slightly higher than before the 1949 devaluations.

#### *The Nature of the Textile Problem in Western Europe*

In the third quarter of 1951, the textile crisis had spread to the whole of western Europe. Retail sales, which in most countries started to decline in the spring, remained at a very low level during the summer, and the opening of the autumn season did not change the picture.<sup>1</sup> The tight credit policy followed in most countries put merchants desperately in need of reducing

stocks, but price reductions had little visible effect on sales, and orders to industry were sharply curtailed. The decrease in production was, in most cases, effected first by a cut in working-hours, but when the crisis continued the numbers employed were also reduced and, in the autumn, unemployment in the textile and clothing industry was higher than a year ago in nearly all countries for which figures are available.

Opinions differ widely as to the scope and perspectives of the present difficulties in the textile industry. The most optimistic interpretation is that the inevitable decline of purchases after last year's speculative buying will last only until raw material prices become stabilized at a new and lower level. Other observers hold that the difficulties in the textile industry in some countries are more of a structural nature, caused by over-expansion after the war.

The importance of short-term factors, such as the buying spree and the great fluctuations of prices, is evidenced by the fact that, in most countries, the market situation is at its worst for woollen textiles and for bed and table linens. It should not be overlooked, however, that in many cases the increases in production after the war were greater in the wool than in the cotton industry, so that, even apart from special influences of the moment, difficulties might be expected to appear first in the wool industry. Moreover, the importance of the spurt in consumer buying last winter can easily be overstressed as a cause of the recession in the textile trade. In Table 15, the volume of textile sales in a number of countries is shown alongside estimates of total supplies of cloth to their home markets, calculated by adding imports to production and subtracting exports.

The table shows clearly that, as far as consumers are concerned, the buying spree in 1950 was of modest dimensions. Apart from western Germany, where the upward trend of textile sales may be partly explained by the fact that textile consumption had still not reached the pre-war level in 1949, Switzerland and Denmark are the only countries where the volume of textile sales in 1950 exceeded the level of the previous year by more than 4 per cent, and in the first half of 1951 textile sales in most countries were back on the 1949 level or even lower. Norway and Austria show a development different from that

<sup>1</sup> In western Germany there have been reports of better textile sales in the autumn, but how much of this may be due to seasonal factors is not clear.



Table 15

INDEX NUMBERS OF VOLUME OF TEXTILE SALES AND SUPPLIES OF CLOTH<sup>a</sup>  
TO THE HOME MARKET

Country	TEXTILE SALES		SUPPLIES OF CLOTH	
	1950 1949=100	Jan.-June 1951 Jan.-June 1949= 100 <sup>b</sup>	1950 1949 = 100	Jan.-June 1951 1949 half-yearly rate = 100
United Kingdom . . . . .	104	104	110	119
Norway . . . . .	93	85	..	..
Sweden . . . . .	104	92	107 <sup>c</sup>	134 <sup>c</sup>
Denmark . . . . .	109	99	117	136 <sup>d</sup>
Netherlands . . . . .	100	94	127 <sup>c</sup>	125 <sup>c</sup>
Belgium . . . . .	104	101	114	150
France . . . . .	..	..	113	111
Switzerland . . . . .	111	108	109 <sup>e</sup>	137 <sup>e</sup>
Austria . . . . .	88	97	112 <sup>f</sup>	128 <sup>f</sup>
Western Germany . . . . .	148	150	142	156
Italy . . . . .	..	..	99	115

Sources: See "Notes to the Statistics".

<sup>a</sup> Unless otherwise indicated, the figures relate to cloth of cotton, wool and artificial fibres.

<sup>b</sup> To eliminate the normal seasonal changes in textile sales, the figures have been based on the first half of 1949 for all countries, except western Germany, where there was an upward trend in textile sales in 1949, and Norway and Austria, where the statistical series have been revised since 1949. For these three countries, sales in January-June 1951 have been based on 47 per cent

of the total textile sales in 1949, the figure 47 per cent being chosen because in all other countries listed in the table approximately that percentage of total textile sales in 1949 took place in the first six months of the year.

<sup>c</sup> Wool and cotton cloth only.

<sup>d</sup> Production in 1951 estimated by assuming production of cloth proportional to total textile production.

<sup>e</sup> Cotton cloth only.

<sup>f</sup> Cloth of wool and artificial fibres only.

in other countries. In Norway, the rationing of textiles which began during the war was not lifted until December 1951, and, in Austria, textile sales appeared to be more sensitive to sudden changes in purchasing power after each successive wage and price agreement than to political events in the outside world.

The figures for supplies to the home market indicate clearly that the speculative attitude of producers and merchants in the textile trade has been of much greater importance than the behaviour of consumers in bringing on the crisis. In all countries except Switzerland and western Germany, supplies to the market in 1950 increased much more than consumer purchases and, in 1951, although purchases declined in most countries, supplies to the home market continued to increase nearly everywhere; textile stocks thus seem to have grown extremely large by the end of the spring of 1951, when raw material prices started to decline and the crisis set in.<sup>1</sup> The

situation seems to have been particularly acute in some of the smaller countries: Sweden, Denmark, the Netherlands, Belgium and Austria. Among the great textile producers—the United Kingdom, France and Italy—supplies increased much less; in western Germany sales increased in about the same proportion as supplies.

In some countries the seeds of the textile crisis were already sown before Korea, as supplies to the home market increased in the first half of 1950 partly because of the liberalization of imports in trade among western European countries and partly because of difficulties arising in exports to overseas countries, which made more goods available to the home market, where sales nevertheless showed little increase. In the United Kingdom, for instance, the volume of domestic textile sales in the first six months of 1950 was only 1 per cent higher than in the corresponding

<sup>1</sup> Statistics for stocks of manufactured textiles are available for only a few countries and are limited either to stocks with manufacturers (as in France and Italy) or stocks held by wholesalers, department stores and co-operatives (as in the United

Kingdom). Only in Denmark are smaller retailers' stocks included in the statistics. Stocks of wool and cotton cloth in Denmark increased between 30 and 40 per cent from the middle of 1950 to the middle of 1951, but stocks of rayon cloth by only 15 per cent. Stocks of finished goods increased still more, by 50 to 70 per cent for men's underwear and clothing, but considerably less for women's wear.

period of the previous year, but total supplies available in the country were about 14 per cent higher, mainly, it would appear, because slack demand in overseas markets in the last several months before Korea led to an accumulation of stocks with exporters and manufacturers.<sup>1</sup> In the Netherlands, the liberalization of imports was not followed by an increase in home sales, which remained at the level of the previous year during the first half of 1950, but total supplies available rose by about 35 per cent.<sup>2</sup> The buying spree in the autumn of 1950 temporarily reduced stocks in most countries, but the steady increase in supplies finally led to the outbreak of the crisis during 1951 as sales fell back to more normal levels.

For the textile industries of the smaller western European producing countries, the longer-term prospects appear rather serious. The figures below show how much textile production in various countries in the first half-year 1951 had increased compared with pre-war :

*Index Numbers of the Volume of Textile Production during the first half of 1951*

(1938 = 100)

Ireland . . . . .	203	Netherlands . . .	146
Norway . . . . .	203	Poland . . . . .	168 <sup>a</sup>
Belgium . . . . .	177	Western Germany	122
Greece . . . . .	174	Italy . . . . .	120
Finland . . . . .	169	France . . . . .	118
Denmark . . . . .	166	United Kingdom .	116
Hungary . . . . .	156	Austria . . . . .	106 <sup>b</sup>
Sweden . . . . .	146	Czechoslovakia .	88 <sup>c</sup>

Sources : See "Notes to the Statistics".

<sup>a</sup> Pre-war territory in 1937 = 100.

<sup>b</sup> 1937 = 100.

<sup>c</sup> Figure for 1950; 1937 = 100.

It will be seen that all of the smaller western European countries, with the exception of Austria, have increased their textile production by 50 per cent or more since the war and some of them have even

<sup>1</sup> This analysis, which seems to be fully borne out by a comparison of data on the volume of total textile sales in the home market and on the estimated change in the volume of supplies, modifies significantly the statement on page 107 of last year's *Survey*, as well as the analysis based on it, that "home consumption of cotton cloth, one of the major British export items, rose by 13 per cent in the first nine months of 1950 compared with the same period in 1949, with an increase in production of only 6 per cent". It should have been specified that the first figure related to *apparent* consumption (corresponding to what is here referred to as "supplies available"), and the data given above, though relating to total textile sales and not to cotton cloth only, indicate that the rise in "apparent consumption" was not matched by a rise in actual consumer purchases.

<sup>2</sup> It will be noted that the figures given above for the United Kingdom and the Netherlands relate specifically to the pre-Korea situation and cover only the first half of 1950, thus differing from the data in Table 15 for the full year.

doubled their output. In nearly all of these countries textile production is based exclusively on sales to the home market. For several years after the war, their expanded output could be easily absorbed, because there was a pent-up consumer demand and because the great textile-producing countries either could not suddenly supply all customers at home and abroad or were, in some cases, kept out of these markets by import restrictions. But now that pent-up demand has been satisfied and import restrictions modified by trade liberalization, the level of textile production in most of the smaller countries seems to be quite out of line with changes in their real national income and in consumption patterns. It is extremely unlikely that these countries will be able to develop textile exports on a large scale, and major structural changes appear unavoidable in the years to come, unless startling increases occur in national income and consumption. This prospect carries with it the danger of a revival of textile protectionism in the smaller countries, which in turn would make the great European textile producers still more dependent on exports to overseas areas. A solution of the western European textile crisis is therefore closely connected with the outlook for world trade in textiles and with Europe's competitive position in the world market, which will be taken up in the next chapter.

*The Pulp and Paper Industries*

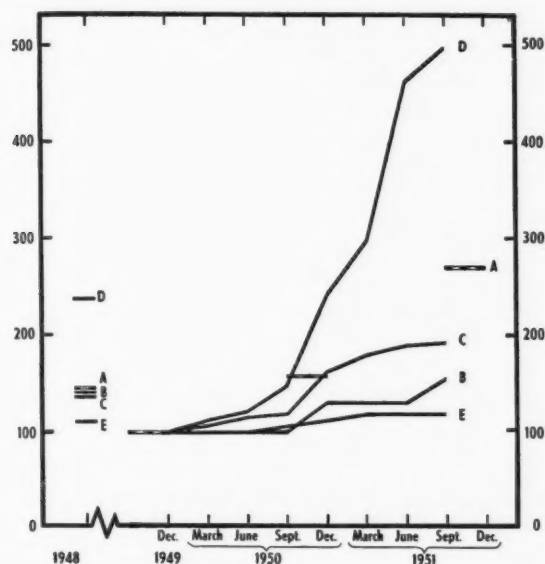
The paper industries were, as mentioned above, less affected by recession tendencies in 1951 than other industries more narrowly dependent on outlets for consumer goods. Although the rate of increase of production slowed down in some countries during the year, and British and Danish production even declined in absolute terms, prices both of paper and of raw materials for paper-making continued to soar throughout the year.

In Chart 4, the remarkable increase in Scandinavian export prices for wood-pulp is contrasted with the stability in the North American price. The effort made by the United States Government in the summer of 1951 to check the rise in world pulp prices by fixing a price ceiling for imports had the effect of shifting Scandinavian exports from the United States to other markets but had no noticeable influence on the level of prices outside North America. The increase in woodpulp prices was supported and stimulated by simultaneous rises in demand and prices for all forest

Chart 4

INDEX NUMBERS OF PRICES OF  
SELECTED WOOD PRODUCTS

December 1949=100 Year 1948 at pre-devaluation rates



Sources : Table XIX in Appendix A.

- A. Roundwood, Sweden, stumpage price.
- B. Pitprops, Finland, export unit value.
- C. Sawn softwood, Sweden, export price.
- D. Pulp, Sweden, sulphate, export unit value.
- E. Pulp, U.S.A., sulphite, wholesale price.

products. During the autumn of 1950 the United Kingdom returned as a heavy buyer of sawn softwood<sup>1</sup> and prices started an upward movement which continued through 1951: by September, sawn softwood prices in most European countries were 50 to 100 per cent higher than a year earlier. Pulpwood prices showed an unprecedented rise of about 100 per cent during the same period. Pitprop prices, on the other hand, lagged behind the general trend, and this led to a considerable reduction in supplies for export; exporting countries preferred to sell their timber in the form of pulp or pulpwood. Recently the price of pitprops has, however, begun to catch up.<sup>2</sup>

On the supply side, there were two factors which contributed to the strength of the pulp and paper market during 1951. During the slump in 1949, large

stocks of pulp and pulpwood had been accumulated, mainly in the exporting countries. When, in 1950, demand recovered in the United States and Europe, the existence of these stocks damped the effect on prices, but by the end of the year they had been run down considerably. The simultaneous turn on the timber market started a fierce competition between pulp and sawmills for the available roundwood, and roundwood prices rose sharply. During 1951 the demand for pulp had to be met mainly from current output; stocks had become so small that their continued depletion did not add materially to supplies.

Already in 1950 the pulp industries had about reached full processing capacity, and the response of production to the boom in prices in 1951 could not be very great.<sup>3</sup> Table 16 shows that European production during the first half of 1951 was only about 10 per cent higher than in the first half of 1950. In Sweden, which is the most important exporter of pulp, the industry is in the process of adjusting production to the supplies of suitable raw materials. Most of the factories are located in the north where forests have been overcut, but in southern Sweden additional supplies of pulpwood have recently become available. Pending these adjustments, the industry will scarcely be able to reach pre-war levels of production<sup>4</sup>; instead, efforts are concentrated on improvements in quality and on processing increasing proportions of woodpulp into paper. In Finland, on the other hand, new mills are replacing those located in the area ceded to the Soviet Union after the war, and as a result pulp production in 1951 increased substantially. Despite this increase in requirements for its own pulp industry, Finland still is one of the few countries with abundant resources of pulpwood and was able to increase exports substantially in 1951 in response to rising prices. This factor contributed to the relatively high rate of expansion which occurred in the pulp industries of the main pulp and pulpwood importing countries in Continental Europe.

The strength of the pulp and paper markets is also explained by a continuous high demand for paper of all types. During 1951 there was an acute scarcity of newsprint: this type of paper, however, was the only commodity in the group covered by allocations of the

<sup>1</sup> See *Economic Survey of Europe in 1950*, page 65, for a fuller discussion.

<sup>2</sup> See Table XIX in Appendix A for further price data.

<sup>3</sup> Contrary to what was expected at the beginning of the year, pulp production was, however, not affected by a shortage of sulphur.

<sup>4</sup> Swedish pulp production reached a pre-war peak of just over 3.5 million tons in 1937 compared with less than 2.9 millions in 1949 and 3.2 millions in 1950.

**Table 16**  
**EUROPEAN PRODUCTION, TRADE AND SUPPLIES OF WOOD-PULP AND PAPER**

*Thousands of tons*

Country		WOOD-PULP <sup>a</sup>				PAPER AND PAPER BOARD <sup>b</sup>			
		1949 (Half-yearly rates)	1950		1951 First half	1949 (Half-yearly rates)	1950		1951 First half
			First half	Second half			First half	Second half	
Sweden . . . . .	Production . . . . .	1,440	1,550	1,600	1,660	540	570	610	630
	Net exports . . . . .	950	1,010	1,080	1,050	300	370	350	370
	Supplies for home market	490	540	520	610	240	200	260	260
Finland . . . . .	Production . . . . .	810	970	950	1,080	340	380	390	440
	Net exports . . . . .	460	570	490	580	260	300	290	330
	Supplies for home market	350	400	460	500	80	80	100	110
United Kingdom .	Production . . . . .	40	60	70	70	1,150	1,280	1,340	1,300
	Exports . . . . .	—	—	—	—	90	110	120	100
	Imports . . . . .	670	720	730	800	220	250	330	380
	Supplies for home market	710	780	800	870	1,280	1,420	1,550	1,580
Nine countries <sup>c</sup> .	Production . . . . .	1,430	1,620	1,710	1,800	2,190	2,480	2,620	2,880
	Exports . . . . .	270	380	380	390	370	440	500	530
	Imports . . . . .	640	740	740	770	210	270	270	320
	Supplies for home market	1,800	1,980	2,070	2,180	2,030	2,310	2,390	2,670
Total of countries listed . . . . .	Production . . . . .	3,720	4,200	4,330	4,610	4,220	4,710	4,960	5,250
	Exports . . . . .	1,680	1,960	1,950	2,020	1,020	1,220	1,260	1,330
	Imports . . . . .	1,310	1,460	1,470	1,570	430	520	600	700
	Supplies for home market	3,350	3,700	3,850	4,160	3,630	4,010	4,300	4,620

Sources: See "Notes to the Statistics".

<sup>a</sup> Paper-making and rayon pulp.

<sup>b</sup> Not including building board (fibreboard). Production of paper and paper board is considerably higher than the supplies of all wood-pulp (paper-

making and rayon pulp) because several other materials are used for paper-making—waste paper, esparto grass, straw, etc.

<sup>c</sup> Austria, Belgium, Denmark, France, western Germany, Italy, the Netherlands, Norway and Switzerland.

International Materials Conference, and the situation in Europe was relieved to some extent by the redirection of certain Canadian supplies (about 30,000 tons) from the United States to Europe. The demand for packaging materials increased steadily with the expansion in industrial activity. The scarcity of jute, originally due to the India-Pakistan trade dispute during 1950, continued to add to the demand for paper, and, as mentioned in the previous section, output of rayon increased by more than 20 per cent during 1951 and demand for dissolving pulp continued high throughout the year.

The boom in the timber trade began to show signs of breaking after the summer. Several European countries reduced their imports because of the high levels reached by prices and freight rates, and remaining sup-

port for the price level came almost exclusively from purchases by the United Kingdom and some overseas markets, for example, Australia, where building activity was booming. Stocks in the United Kingdom are now replenished, however, and the new Government has announced import cuts.

The first sign of consumer resistance to the high price level for pulp came when Scandinavian export prices for the first quarter of 1952 were fixed at a level no higher than in the last quarter of 1951. Production of pulp in North America is now reported to exceed demand at the controlled prices, and considerable quantities may become available for export to Europe. It is more doubtful whether or no European countries will have enough dollars available to relieve their shortages from this source.



#### 4. HEAVY INDUSTRY

##### *The Growth of Demand for Engineering Products of Western Europe*

As expected, the year 1951 saw very considerably increased demands placed on the engineering industries of western Europe. Less expected was the relative ease with which these demands were met; the market for engineering products certainly hardened but was by no means wildly inflated. In some cases, order books lengthened, but not inordinately; in others, delivery delays hardly increased at all. At the end of the year there remained in several countries of western Europe branches of the engineering industry where producers were more than anxious to obtain new orders and where a "buyers' market" could even be said to exist.

As discussed at some length in the SURVEY for 1950, the high prices for primary products increased very considerably the purchasing power of countries which produced them, and most of these countries wished to spend a large proportion of their increased earnings on capital goods for development. Equally important was the behaviour of private industry in western Europe, which in nearly all countries took the opportunity, soon after Korea, to buy plant and equipment which it feared would not be obtainable later: there were also present all the conditions for a rise in home investment induced in the normal way by a general upswing in economic activity. Finally, rearmament played its part. Some idea of the relative importance of home and overseas demand in making up the increase in total demand from all quarters may be gained by comparison of the following index numbers, which relate to the production and exports of the five most important western European producers—Belgium-Luxembourg, France, Italy, western Germany and the United Kingdom:

##### *Index Numbers—first 9 months of 1951* (First 9 months of 1950 = 100)

Total engineering production . . . . .	117
Exports to European countries <sup>a</sup> . . . . .	118
Exports to overseas countries <sup>a</sup> . . . . .	117

<sup>a</sup> Machinery, vehicles and other transport equipment.

The movement of the three index numbers is remarkably close; thus investment (and rearmament) inside Europe, and exports to overseas countries maintained

the shares they held in 1950. There were, however, considerable variations in the experience of individual countries, as shown by the following break-down:

##### *Index Numbers—first 9 months of 1951* (First 9 months of 1950 = 100)

	Total engineering production	Exports of machinery, vehicles and other transport equipment
Belgium . . . . .	122	116 <sup>a</sup>
France . . . . .	114	140
Italy . . . . .	107	123
Western Germany . . . . .	140	173
United Kingdom . . . . .	105	103

<sup>a</sup> The coverage of this figure is substantially different from the total given in Table 20 which, it will be seen, includes a number of finished steel products and relates to a different period.

In France, Italy and western Germany, the pull from export markets was by far the strongest element, but in the United Kingdom both exports and home deliveries were held down by factors on the supply side.

Tables 17 to 20 below, which show the movements of production, home deliveries and exports of a number of engineering products of Belgium, France, western Germany and the United Kingdom, describe the picture in more detail. These details give some idea of the scope and extent of the boom in home investment by private industry. (Quite a different picture emerges for publicly owned or operated industry, which will be discussed below.) In all four countries, home deliveries of most engineering products in the first six or first nine months of 1951 were considerably greater than in the corresponding period of 1950. But in some cases the strength of the immediate post-Korean boom seemed to weaken during 1951. In Belgium, in the first half of the year, home deliveries of some of the products listed fell off from the high levels reached in the second half of 1950, and in western Germany the increase in home deliveries in the third quarter (compared with the corresponding period of 1950) was considerably less than that of previous quarters in nearly all cases; in some cases home deliveries fell absolutely. Some of these absolute declines seem, however, to have been due not so much to a change in demand as to supply limitations



Table 17

UNITED KINGDOM : PRODUCTION <sup>a</sup> FOR THE HOME MARKET AND FOR EXPORT OF SELECTED ENGINEERING PRODUCTS

Quantities or values and index-numbers — January-September 1950 = 100

Item	Value of production <sup>a</sup> in 1950 (£ million)	Unit of measurement	PRODUCTION <sup>a</sup> OR DELIVERIES IN THE FIRST 9 MONTHS OF 1951					
			Total		For export		For home market	
			Quantity or value <sup>b</sup>	Index numbers	Quantity or value	Index numbers	Quantity or value	Index numbers
Passenger cars and chassis . . . . .	189.0 <sup>c</sup>	Thousands	471.2	92	364.7	89	106.5	101
Commercial motor vehicles and chassis <sup>d</sup> . . . . .	146.0 <sup>c</sup>	Thousands	257.0	99	160.7	97	96.3	102
Typewriters and office machinery <sup>e</sup> . . . . .	21.9	£ million	28.0	135	10.3	149	17.7	128
Tractors <sup>f</sup> . . . . .	47.2 <sup>e</sup>	Thousands	142	123	108	136	34	93
Agricultural machinery <sup>g</sup> . . . . .	84.7	£ million	105.2	127	56.1	142	49.1	114
Civil engineering plant . . . . .	16.8	£ million	22.4	136	10.2	134	12.2	137
Textile machinery <sup>e</sup> . . . . .	69.5	£ million	73.5	108	36.4	101	37.1	115
Printing and bookbinding machinery <sup>e</sup> . . . . .	17.6	£ million	17.8	106	8.2	96	9.6	117
Refrigerating machinery <sup>h, i</sup> . . . . .	23.6	£ million	28.9	123	13.5	147	15.4	107
Steam engines, boilers, etc. <sup>j</sup> . . . . .	39.1	£ million	43.1	113	11.5	113	31.6	113
Internal combustion engines <sup>h, k</sup> . . . . .	38.6	£ million	44.6	116	24.5	112	20.1	122
Rotating electrical machinery . . . . .	29.7	£ million	32.2	111	6.9	108	25.3	112
Mechanical handling equipment <sup>l</sup> . . . . .	37.8	£ million	51.5	112	15.8	109	35.7	113
Metal-working machine tools . . . . .	38.7	£ million	45.2	120	15.7	114	29.5	124
Steam locomotives . . . . .	12.9	Number	726	95	399	114	327	79
Railway coaching vehicles . . . . .	15.3	Number	2,265	70	385	110	1,880	65
Railway wagons . . . . .	20.2	Number	40,619	135	3,071	66	37,548	148
Electricity generating plant :								
Hydraulic turbines . . . . .	..	Thousand BHP	542.4	88	541.5	131	0.9	—
Steam turbo-alternators <sup>m</sup> . . . . .	..	Thousand kW	1,809	86	941	130	868	63
Coal cutters . . . . .	2.6	Number	631	71	215	62	416	77
Power loaders . . . . .	0.4	Number	68	67	12	32	56	88
Underground conveyors . . . . .	7.2	Number	2,891	101	547	78	2,344	108
Tubs and mine cars <sup>n</sup> . . . . .	1.6	Thousand tons <sup>o</sup>	57.7	100	0.5	50	57.2	101
Aircraft <sup>p</sup> . . . . .	..	Number	539	97	536	105	3	6

Sources : Monthly Digest of Statistics, December 1951, and information supplied by the Central Statistical Office of the United Kingdom.

NOTE. — The quantities or values shown refer to the annual rate of nine months.

<sup>a</sup> Figures refer in many cases to deliveries, rather than production. For details, see the source mentioned above.

<sup>b</sup> Or other unit of measurement.

<sup>c</sup> Including spares produced by motor manufacturers.

<sup>d</sup> Excluding battery-driven electric road vehicles.

<sup>e</sup> Including parts and accessories.

<sup>f</sup> Agricultural and industrial, more than 10 HP.

<sup>g</sup> Including tractors.

<sup>h</sup> Figures of total deliveries and deliveries for home market include those against government orders.

<sup>i</sup> Domestic, commercial and industrial.

<sup>j</sup> Other items include steam-raising plant and accessories and industrial valves.

<sup>k</sup> Other than for vehicles, aeroplanes or ships.

<sup>l</sup> Other than mechanically propelled work trucks.

<sup>m</sup> Ten thousand kW and over.

<sup>n</sup> Excluding those produced at collieries.

<sup>o</sup> Carrying capacity.

<sup>p</sup> Excluding military aircraft, except for export.

Table 18

FRANCE: PRODUCTION, EXPORTS AND SUPPLIES FOR THE HOME MARKET  
OF SELECTED ENGINEERING PRODUCTS

Item	Unit	Quantities or values			Index numbers—first half 1950=100					
		Production	Exports	Supplies for home market <sup>a</sup>	Production		Exports		Supplies for Home market <sup>a</sup>	
		First half 1951			1950	1951	1950	1951	1950	1951
		Second half	First half	Second half	First half	Second half	First half	Second half	First half	Second half
Passenger cars . . . . .	Thousands	158.3	50.7	107.6	110	129	100	114	115	137
Commercial vehicles and chassis <sup>b</sup> . . . . .	Thousands	64.5	16.8	47.7	119	143	118	127	119	150
Motor cycles . . . . .	Thousands	209.17	12.21	196.96	129	226	141	243	128	225
" Scooters " . . . . .	Thousands	5.02	..	..	..	784 <sup>c</sup>	..	..	..	..
Wireless sets . . . . .	Billion francs	17.92	2.97	14.95	130	166	97	158	137	167
Electrical heating and other equipment for domestic use . . . . .	Billion francs	9.22	0.72	8.50	130	169	106	133	132	172
Metal furniture . . . . .	Thousand tons	27.00	7.75	19.25	125	133	112	154	129	126
Tractors (including industrial) . . . . .	Number	7,966	3,108	4,858	87	100	120	190	79	77
Machinery for the food, oil and soap industries . . . . .	Thousand tons	8.90	2.17	6.73	109	111	82	94	122	118
Textile machinery . . . . .	Thousand tons	19.65	7.11	12.54	106	122	125	128	96	119
Machinery for the chemical industry . . . . .	Thousand tons	6.35	0.90	5.45	127	109	55	127	138	107
Material for telegraphs, telephones, etc.. . . . .	Billion francs	8.61	0.76	7.85	112	121	88	112	114	122
Steam engines and steam and gas turbines . . . . .	Thousand tons	3.50	1.06	2.44	97	103	113	196	94	85
Internal combustion engines <sup>d</sup> . . . . .	Thousand tons	16.00	3.28	12.72	90	107	385	315	68	91
Electrical machinery . . . . .	Billion francs	34.17	6.02	28.15	121	134	145	210	118	125
Electrical apparatus . . . . .	Billion francs	19.35	3.44	15.91	107	135	127	181	104	128
Mechanical handling equipment . . . . .	Thousand tons	28.90	8.00	20.90	108	112	102	133	110	105
Measuring instruments . . . . .	Billion francs	5.53	0.71	4.82	99	130	64	96	107	138
Railway locomotives and tenders . . . . .	Number	109	72	37	82	111	169	450	65	45
Railway wagons . . . . .	Number	3,852	1,529	2,323	75	65	255	1,403	72	40
Passenger railway coaches . . . . .	Number	117	61	56	136	102	4,500	3,050	58	50
Civil engineering material . . . . .	Thousand tons	16.00	5.74	10.26	81	91	89	127	78	79

Sources: Information supplied by the Ministère de l'Industrie et du Commerce and *Bulletin mensuel de statistique industrielle*.

<sup>a</sup> Production less exports.

<sup>b</sup> Lorries and coaches. It has been assumed that the entire export of chassis related to commercial vehicles.

<sup>c</sup> Eleven months of 1951, at an annual rate, compared with the whole year 1950.

<sup>d</sup> Other than for vehicles, aeroplanes and ships.

which prevented output from rising sufficiently to meet the very large increases in export demand without cutting deliveries to domestic buyers. The other commodities for which deliveries in the third quarter fell below those of twelve months previously were nearly all consumer goods and were doubtless affected by a recession in demand of the same nature as that described in section 3 above. In France, on the other hand, the fear of continued inflation may have been the cause of the substantial boom which occurred in the branches of the engineering industry producing

durable consumer goods. Production for the home market of motor-cycles and radios, for example, increased much more (between the first half of 1950 and the first half of 1951) than any of the items listed of producers' investment goods. Waiting lists for new cars lengthened considerably even though the greater part of the increase in French production of passenger cars went to the home market, and the 50 per cent increase in home supplies of commercial vehicles was no doubt another expression of the desire to acquire "stable values".

Table 19

WESTERN GERMANY : PRODUCTION, EXPORTS AND SUPPLIES FOR THE HOME MARKET OF SELECTED ENGINEERING PRODUCTS  
Quantities or values and index numbers

Item	Value of production in 1950 (Million DM)	Unit of quantity	PRODUCTION			EXPORTS			SUPPLIES FOR HOME MARKET <sup>a</sup>		
			January-September 1951	Third quarter 1951	Index numbers	January-September 1951	Third quarter 1951	Index numbers	January-September 1951	Third quarter 1951	Index numbers
			Quantities	Jan.-Sept. 1950 = 100	Third quarter 1950 = 100	Quantities	Jan.-Sept. 1950 = 100	Third quarter 1950 = 100	Quantities	Jan.-Sept. 1950 = 100	Third quarter 1950 = 100
Passenger cars and chassis . . . . .	1,215	Thousands	274	136	114	92	158	120	182	127	111
Commercial motor vehicles and chassis . . . . .	496	Thousands	93	123	87	29	157	128	64	112	76
Motor cycles <sup>b</sup> . . . . .	228	Thousands	309.8	122	100	30.8	218	155	279.0	117	96
Bicycles . . . . .	142	Thousands	1,307.8	93	62	212.2	586	466	1,095.6	80	47
Storage batteries . . . . .	89	Thousand tons	35.7	131	104	3.8	182	88	31.9	127	106
Typewriters <sup>c</sup> . . . . .	76	Thousands	314.5	173	..	86.4	289	187	228.1	151	..
Sewing machines <sup>d</sup> . . . . .	190	Thousands	720	151	136	349	240	260	371	112	92
Radio receivers . . . . .	304	Thousands	2,111.2	129	111	..	..	..	..	..	..
Agricultural tractors <sup>e</sup> . . . . .	341	Thousands	132.3	157	133	46.1	162	166	86.2	155	118
Other agricultural machinery . . . . .	308	Thousands	213.8	108	96	58.4	141	147	155.4	99	88
Construction machinery . . . . .	115	Thousands	54.6	127	114	..	..	..	..	..	..
Textile machinery <sup>e</sup> . . . . .	237	Thousands	60.2	137	139	20.8	245	241	39.4	111	110
Shoe and leather-working machinery . . . . .	43	Thousands	9.4	127	113	4.6	225	159	4.8	89	89
Refrigerators and refrigerating machinery . . . . .	145	Thousands	32.7	110	122	6.9	389	378	25.8	119	99
Paper and printing machinery . . . . .	212	Thousands	56.5	143	150	30.2	194	162	26.3	110	138
Food and drink-processing machinery . . . . .	204	Thousands	66.2	123	112	16.7	223	170	49.5	107	101
Internal combustion engines <sup>f</sup> . . . . .	164	Thousands tons	59.5	194	183	31.1	225	249	28.4	168	128
Compressors and compressing machinery . . . . .	221	Thousands tons	71.4	135	124	20.5	233	221	50.9	116	104
Mechanical handling equipment . . . . .	121	Thousands tons	62.5	133	129	27.1	208	163	35.4	104	109
Precision tools . . . . .	134	Thousands tons	15.6	162	179	..	..	..	..	..	..
Wood-working machine tools . . . . .	123	Thousands tons	41.5	116	112	11.8	239	265	29.7	97	86
Metal-working machine tools . . . . .	383	Thousands tons	123.0	164	153	52.4	199	166	70.6	145	142
Steam locomotives . . . . .	62	Thousands tons	31.7	162	168	8.7	284	336	23.0	140	121
Railway wagons . . . . .	22	Thousands tons	579	21	53	..	..	..	..	..	..
Mining machinery . . . . .	254	Thousands tons	153.1	108	110	..	..	..	..	..	..
Construction of new ships <sup>g</sup> . . . . .	194	Million DM	233.7	186	..	8.4 <sup>h</sup>	260 <sup>h</sup>	..	225.3	184	..
Ship repairs <sup>g</sup> . . . . .	182	Million DM	213.1	133	..	98.0 <sup>h</sup>	177 <sup>h</sup>	..	115.1	109	..

Sources: Die Industrie der Bundesrepublik Deutschland; Der Aussenhandel der Bundesrepublik Deutschland.

<sup>b</sup> Including cycles with motors and "scooters". "Scooters" are not, however, included in the production data for the third quarter of 1951.

<sup>c</sup> Six months, January-June.

<sup>d</sup> Domestic and industrial.

<sup>e</sup> Not including parts and accessories.

<sup>f</sup> Other than for vehicles, aeroplanes and ships.

<sup>g</sup> Completions.

<sup>h</sup> Construction of, or repairs to, ships for foreign countries and for the occupation authorities.

Note. — The quantities or values shown refer to annual rates of 9 months. In cases where figures for less than 9 months of 1951 were available, the index numbers are based on the corresponding period of 1950.

<sup>a</sup> Production less exports.

Table 20

**BELGIUM : PRODUCTION, EXPORTS, HOME DELIVERIES AND INDICATORS OF PRODUCTIVITY  
IN THE METAL AND ENGINEERING INDUSTRIES**

Industrial group	Total deliveries as % of (Millions of francs) deliveries	Index numbers — first half 1950 = 100																Output per man-hour			
		QUANTITIES DELIVERED												Average hours worked per man							
		Total			For export			For home market			Labour force					1949		1950		1951	
		Half-yearly rate	Second half	First half	Half-yearly rate	Second half	First half	Half-yearly rate	Second half	First half	Half-yearly rate	Second half	First half	Half-yearly rate	Second half	First half	Half-yearly rate	Second half	First half	Half-yearly rate	
Steel-casting . . . . .	322	23.3	137	98	134	145	94	114	135	99	138	131	96	101	101	101	104	103	101	128	
Foundries . . . . .	577	9.1	106	103	114	156	141	147	103	101	111	103	96	95	99	102	107	105	105	111	
Cold-drawing, cold-rolling . . . . .	1,377	52.9	93	115	156	96	121	173	89	107	129	104	106	119	104	106	103	87	103	127	
Forging, pressing, stamping and related industries . . . . .	630	22.6	124	107	137	130	148	183	122	94	120	128	102	110	102	102	102	95	104	123	
Sheet-metal and miscellaneous metal manufactures . . . . .	1,818	37.0	92	123	141	88	132	162	96	113	119	105	105	106	102	101	103	86	115	130	
Metal accessories for the building industry . . . . .	977	7.4	106	129	125	74	171	166	109	125	122	99	106	111	99	100	101	109	122	112	
Bridges, girders, boilers . . . . .	1,060	10.8	71	98	96	214	114	146	60	97	92	83	108	105	105	99	100	81	91	91	
Shipbuilding . . . . .	1,000	55.2	101	77	63	136	81	72	69	73	55	132	105	124	98	98	98	78	75	52	
Machine tools . . . . .	455	57.9	247	83	112	256	88	138	235	77	77	173	88	86	96	97	109	148	98	118	
Textile machinery and equipment . . . . .	455	72.3	..	97	112	..	96	113	..	100	112	..	106	106	..	98	100	..	94	106	
Mechanical handling equipment . . . . .	353	36.7	128	97	99	132	91	82	125	100	107	105	101	104	100	101	102	122	95	94	
Appliances and equipment for miscellaneous industries . . . . .	956	32.5	115	110	113	119	87	122	113	120	109	107	98	97	98	100	101	110	113	115	
Electrical equipment . . . . .	3,574	28.4	102	109	121	131	118	171	96	107	110	108	104	113	99	99	100	96	106	108	
Motors-cars, cycles and aircraft . . . . .	1,286	16.0	73	98	95	75	102	98	72	97	94	107	108	111	101	98	103	68	93	83	
Railway and tramway equipment . . . . .	535	55.6	417	79	102	516	104	128	312	52	75	261	80	86	103	103	105	155	95	113	
TOTAL . . . . .	15,375	32.3	114 a	106 a	118 a	150 a	110 a	141 a	102 a	103 a	107 a	115	102	108	99	100	101	98 b	103 b	107 b	

Source : *Bulletin de statistique*.

NOTE. — The index numbers of quantity relate to the crude tonnage weight of goods delivered. The column headed "Output per man-hour" shows the index numbers of total quantities delivered divided by index numbers of aggregate man-hours worked. All the index number series in the "Total" line have been spliced at the first half of 1950 to allow for the subsequent inclusion of textile machinery, for which no earlier figures are available.

a Average of the index numbers in the column weighted by value of total deliveries, deliveries for home market and for export, respectively, in the base period. The figures for over-all output are not identical to the product of over-all output per man-hour, average hours worked per man and employment, because of the differences in the weighting systems used. (See also b below.)

b Average of the index numbers in the column weighted by aggregate man-hours worked in the base period.



The importance of rearmament for the engineering boom is difficult to assess. In general, its effects do not seem to have been very great in the period covered by the tables. The United Kingdom Government had planned to place extra (rearmament) demands amounting to some 6 or 7 per cent of the total output of the United Kingdom's metal-using industries in 1951. This programme is announced to have fallen behind, but by how much is not known. The rate of build-up of expenditure on defence *matériel* in other countries is an even more elusive statistic, but there are a number of signs that rearmament orders from various sources are beginning to act as tributaries to the general flow of demand for western European engineering products. Thus, the United Kingdom in the course of the year placed orders for machine-tools totalling \$10 million (equivalent to about one-tenth of one year's output of its own machine-tool industry), in France, Italy, Belgium, and western Germany, including west Berlin. West German machine-tool exports more than doubled in volume from the first to the second half of 1950 and maintained that level in the first half of 1951. Despite this, western German machine-tool manufacturers were still able, in the late autumn, to advertise prompt delivery in United States trade journals. Belgian machine-tool exports rose to 38 per cent above the volume of the first half of 1950, but were still a long way below the 1949 level. In Italy, a large part of the machine-tool industry has been lying idle since 1948, but rearmament orders began to provide some stimulus towards the end of 1951. About the same time there were also reports that the United States was seeking to place substantial orders for military goods in Belgium.

#### *The Decline in Public Investment in Plant and Equipment*

The main reasons why the engineering industry of western Europe, taken as a whole, was able to meet these increased demands for private investment and export without undue strain were (1) that the industry, especially in western Germany, had been operating well below its 1950 capacity, and (2) that in 1951, investment in plant and equipment was sharply reduced in nationalized industries and non-nationalized industries which are mainly operated as a public service. The first of these two factors was more important than the second, but the second was by no means insignificant. Tables 17 to 20 provide clear evidence that declines

in "public" investment in plant and equipment were common to all four countries listed. The phenomenon was most marked in the United Kingdom where, out of ten products<sup>1</sup> listed which are mainly bought by nationalized industry, home deliveries declined for seven;<sup>2</sup> on the other side of the picture, there was only one case of a fall in home deliveries out of all the remaining fourteen products which are mainly sold to private industry. With the exception of railway wagons in the United Kingdom and locomotives in western Germany, home deliveries of railway equipment of all the types listed fell in all four countries, and in France production for the home market fell in the industries mainly supplying public works projects. There were also reports from many parts of western Europe that Government orders for heavy electrical generating plant were insufficient to keep these industries fully occupied: in the United Kingdom, home deliveries of this type of equipment declined very substantially, as shown by the figures, but in other countries the classifications for electrical equipment are too broad to provide statistical confirmation of these reports.

These developments in public investment reflected the efforts of Governments to reduce the inflationary effects of rearmament in general as well as to release specific resources in the engineering industry for both rearmament and export. In the special case of railways, this influence was reinforced by the continued tailing-off of post-war re-equipment and by financial difficulties which are a universal post-war feature of European railway systems. The marked contrast between this development and the investment boom in private industry was not, apparently, the result of a deliberate plan to cut investment in basic industries more than elsewhere, but rather the consequence of the greater ease with which these industries could be controlled.<sup>3</sup> This is particularly clear in the United

<sup>1</sup> I.e., the last ten products listed in the table.

<sup>2</sup> Two of the exceptions, not surprisingly, were in coal-mining equipment; underground conveyors rose 8 per cent and mining cars and tubs remained virtually constant.

<sup>3</sup> It must, however, be remembered that, since rearmament programmes place their first demands on the steel and engineering industries, both require much new plant, deliveries of which cannot be separated statistically from deliveries to private industry for civilian purposes. Heavy increases in home deliveries of metal-working machine-tools in the United Kingdom, Belgium and western Germany provide the obvious examples; others, less obvious, may lie in the figures for rotating electrical machinery in the United Kingdom and precision instruments in western Germany.



Kingdom, where the fall in public investment (outside railways) was most marked, where all the basic industries are nationalized, where the need for general restriction was particularly urgent because the rearmament programme was heavier than in most other western European countries, and where the engineering industry provided the major exception to the general European rule that production could expand fairly easily. It is noteworthy that, in the United Kingdom, exports performed relatively badly in several cases where home deliveries rose (that is, in plant and equipment for private industry), but did well in most of the cases where home deliveries fell. This seems to represent a measure of success for the Government's policy. It suggests, however, that more drastic measures are now required to restrain the investment demands of private industry, if engineering exports are to be further raised.

#### *The Response of Production*

The engineering industries of western Europe responded to the increased demands placed upon them with a rise in production of some 15 per cent from the first nine months of 1950 to the same period of 1951.<sup>1</sup> By far the most important element was the continued upsurge of production in western Germany, west Berlin and Austria. Western Germany increased its own output of engineering products by 40 per cent and west Berlin by considerably more and, together with Austria, their increase in production accounted for 10½ percentage points out of the western European total of 15. It is most significant that, since west-German engineering production reached a level about one-third above pre-war in the fourth quarter of 1950, its curve (Chart 5) has been flattening out by comparison with earlier periods and seems to correspond to an annual rate of increase of, say, 15 per cent. Western Germany has by now become the largest single supplier of industrial machinery to other European countries.

The rise in production in France<sup>2</sup> and Belgium from the depressed levels of early 1950 provided the second largest element in the expansion of western

European engineering output, but it was a very poor second and accounted for only about one-sixth of the total western increase. Chart 5 gives some indication of the extent to which these two industries were previously under-employed in 1950. However, 60 per cent of the French index relates, not to actual engineering production, but to the "apparent" consumption of steel<sup>3</sup> in France. Hence the index tends to reflect fluctuations in inventories with which the French engineering industries seem to have been afflicted in the past few years, rather than the real course of engineering output: it is hard to believe that French engineering production in the second quarter of 1951 was still no higher than two years previously. In Belgium, production in the first nine months of 1951 was above, but not greatly above, the corresponding period of 1949; Table 20, however, shows that output per man-hour was rising very much faster than before Korea. This group of engineering industries in Belgium demonstrates *par excellence* how productivity can be stimulated by buoyant demand.<sup>4</sup> In Italy, there was, and still remains, unused capacity in the engineering industries, yet Italian production rose by only 7 per cent between the first three quarters of 1950 and the same period of 1951, compared with 14 per cent for France and 21 for Belgium, and contributed only one fiftieth of the total increase in western European engineering output over this period.<sup>5</sup>

In the United Kingdom and the Scandinavian countries where production capacity was already more or less fully occupied, engineering production rose no more than 5 per cent from 1950 to 1951 (based on the first three quarters of each year) and, though their output currently makes up about 40 per cent of total western European engineering production, they accounted for only about one-sixth of the increase in

<sup>3</sup> Excluding building steel and railway construction material.

<sup>4</sup> The following are computed from the last line of the last three columns of Table 20:

*Output per Man-hour in Belgian Engineering Industries*  
(Percentage increases, annual rates)

Year 1949 to year 1950	First half 1950 to second half 1950	Second half 1950 to first half 1951
3½	6	8

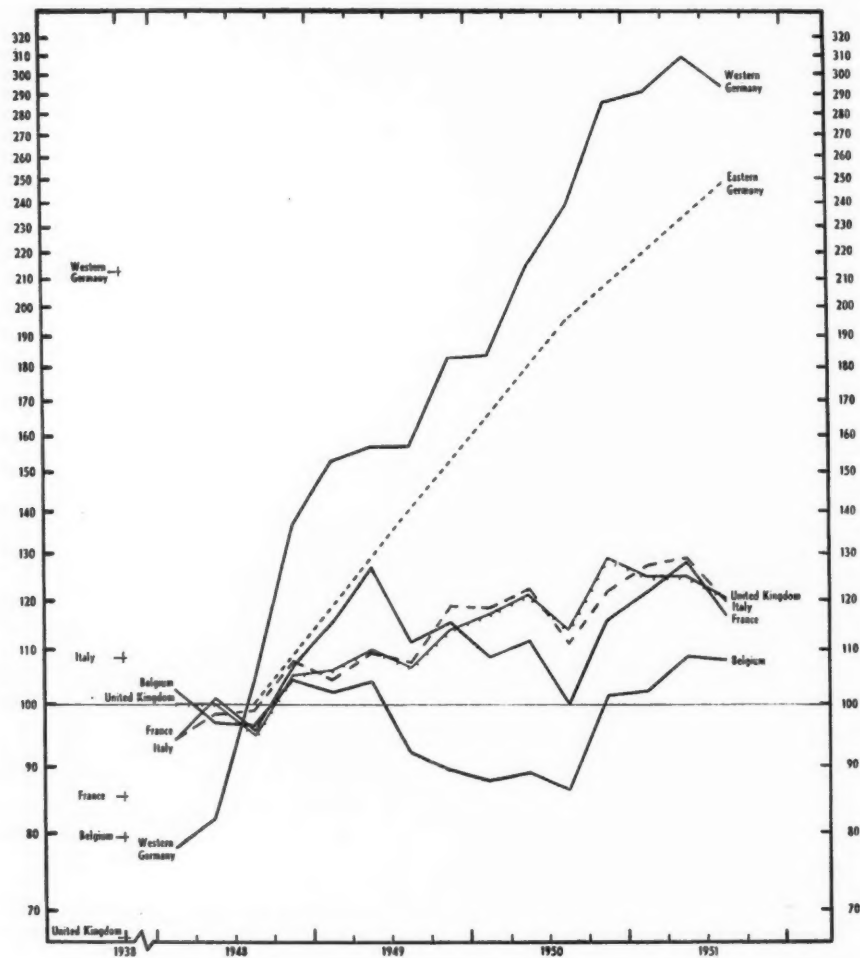
<sup>5</sup> The unused capacity in Italy (in shipbuilding, for instance) lies in a different category from that which existed in 1950 in France and Belgium, since in Italy engineering production has not fallen significantly during any period in the last few years. But engineering production is only just above the 1938 level.

<sup>1</sup> See Table III in Appendix A showing index numbers of engineering production for nearly all countries in western Europe and some countries in eastern Europe.

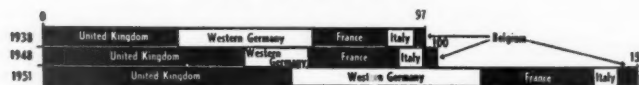
<sup>2</sup> The French contribution to the total engineering index for western Europe is based on the French official index, the deficiencies of which are discussed in the text.

Chart 5

ENGINEERING PRODUCTION IN SELECTED EUROPEAN COUNTRIES  
Semi-logarithmic scale Index numbers — average 1948=100



SHARE OF INDIVIDUAL COUNTRIES IN ENGINEERING PRODUCTION  
IN 1938, 1948 AND 1951



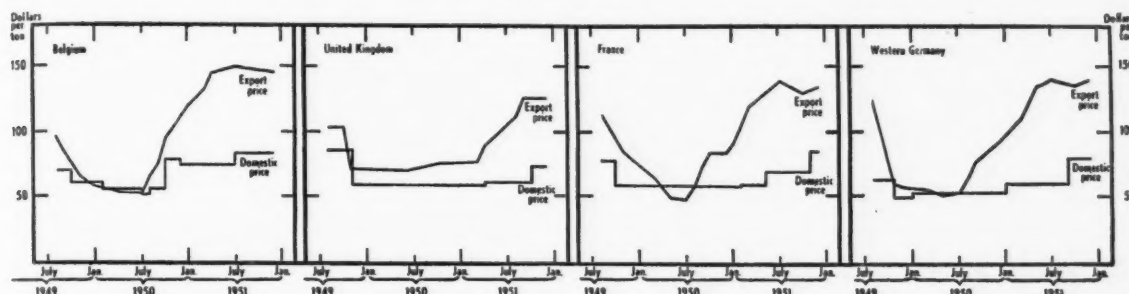
Source : Table III in Appendix A, except for eastern Germany.

NOTE. — The curve for eastern Germany is based on annual figures only; in 1951, the plotting-point is an estimate for the whole year based on the level of production of the first 9 months compared with the first 9 months of 1950.

Chart 6

MOVEMENTS OF EXPORT AND DOMESTIC PRICE QUOTATIONS FOR STEEL BARS

Dollars per ton



Sources : Data collected by the Steel Section, Power and Steel Division, Economic Commission for Europe. For details see "Notes to the Statistics".

NOTE. — The domestic price relates in all cases to the officially controlled maximum. The export price relates to "free market" quotations for export except in the United Kingdom, where it relates to the official minimum.

the total over this period.<sup>1</sup> The engineering industry of the United Kingdom was affected by reconversion and afflicted by a shortage of steel; employment rose steadily but production hardly kept pace. The following figures show that British output per man-year (seasonally corrected) has been virtually stagnating since the end of 1950 :

*Output per Man-year in the Engineering Industries  
of the United Kingdom  
Index Numbers*

(Corresponding quarter of the previous year = 100)

	1950	1951
First quarter <sup>a</sup> . . . . .	111	102
Second quarter <sup>a</sup> . . . . .	110	99
Third quarter . . . . .	109	100
Fourth quarter . . . . .	110	..

NOTE. — The figures represent the official index of production for engineering, shipbuilding, electrical goods and vehicles, divided by an index of employment in the same industries.

<sup>a</sup> Seasonally corrected for Easter in the same manner as Table III in Appendix A.

This stagnation, which was in marked contrast to the experience of 1950 and earlier post-war years, was largely due to an absolute decline in output per man-year in the vehicles group.

<sup>1</sup> In the Netherlands, the nature of the official engineering index is such that it cannot be employed in the present analysis. The index, for which the weights are not published, is thought to cover only about one-fifth of the whole field and to be heavily overweighted with unfinished products (including steel) at one extreme and consumer goods at the other. It appears to contain hardly any capital goods.

*The Demand for Steel in Western Europe*

The boom in the engineering industries of western Europe, combined with large unusual demands from the United States and considerable, though unsatisfied, demands from other overseas countries, produced a condition of substantial inflation in the western European market for steel. Prices rose and delivery periods lengthened. Chart 6 shows the movement of Europe's most sensitive steel price index, the "free" export quotation for Belgian bars, and the somewhat more sluggish movement of export prices charged by other major steel exporters. It appears that steel prices rose very rapidly from the latter part of 1950 until the middle of 1951, when they began to show some flattening out, but there was no sign of any significant relapse. By August 1951, even the relatively stable United Kingdom export quotation had risen by 80 per cent from its level of a year before.

In France, the average delay between home order and delivery, which had risen from one month to three in August 1950, increased progressively to seven and even twelve months for orders placed during the first half of 1951. In Belgium, delivery delays were kept down only by the high prices charged (for exports) and by the practice followed by steel makers of refusing completely orders which they could not deliver fairly quickly. Throughout 1951, this market was extremely agitated and inflated, as it was to Belgium that most marginal buyers of steel turned. United States motor-car manufacturers, for instance, sent buyers to Brussels, hoping to supplement their rationed

supplies of steel sheets; some were successful, others are known to have found prices above the level of their maximum offers.

A good general indication of the strength of demand for steel in western Europe during the year is given by the fact that the steel industries of France, the Saar, Belgium and Luxembourg, all of which had been producing in the first half of 1950 at an annual rate below 1949 because of slack demand, recovered with a total increase of nearly 30 per cent in crude steel output by the first half of 1951.<sup>1</sup> In western Germany, where the industry was hampered by raw material shortages, the increase in crude production from the first half of 1950 to the first half of 1951 was much less—about 13 per cent—while in the United Kingdom the shortage of raw materials was so serious that ingot production fell. The latest information suggests that, over the whole of 1951, western European crude steel production will total about 12 per cent more than in 1950. New plant completed during the year in the United Kingdom and France, together with steps taken to reactivate plant in western Germany, should have provided enough capacity in western Europe to produce perhaps 3½ million tons, or 7 per cent, more crude steel than this estimate of the out-turn for 1951, but

<sup>1</sup> See Table IX in Appendix A.

western European capacity could not be fully used because raw material supplies were inadequate.

Although production of finished steel generally increased by more than that of ingots,<sup>2</sup> supplies were far from sufficient to satisfy the demand. Table 21 shows the distribution between home markets and exports of the finished steel output of the four major producers in western Europe, the United Kingdom, western Germany, France-Saar and Belgium-Luxembourg. In these four centres, production of finished steel increased by slightly more than 1½ million tons between the first and second halves of 1950, and by another 1½ million tons from the second half of 1950 to the first of 1951. It will be seen that despite these increases in production, home market supplies in the group as a whole increased by only 4 per cent in the first period and 7 per cent in the second. More than a quarter of the increase in production in the first period went to Canada and the United States; in fact North America obtained 2½ times as much steel from the four major European producers in

<sup>2</sup> The explanation is that stocks of ingots and semis were run down; see page 53. By the same token, the movements depicted in Table 21 differ significantly from those indicated in Table X, Appendix A, and Table 4 of the *Bulletin* for the second quarter 1951, both of which latter are on a crude-equivalent basis.

Table 21

PRODUCTION AND EXPORTS OF FINISHED STEEL OF THE UNITED KINGDOM, WESTERN GERMANY, FRANCE-SAAR, AND BELGIUM-LUXEMBOURG

Millions of tons and percentages

	Production and exports			Increase over previous half year			
	1950		1951	1950		Percentages 1950 1951	
	First half	Second half	First half	Second half	First half	Second half	First half
Production . . . . .	16.81	18.38	19.99	1.57	1.61	9	9
of which :							
Available for home market <sup>a</sup> . . . . .	11.64	12.12	12.93	0.48	0.81	4	7
Exported to :							
Other European countries <sup>b</sup> . . . . .	2.11	2.32	2.71	0.21	0.39	10	17
United States and Canada . . . . .	0.28	0.72	1.23	0.44	0.51	157	71
Rest of world . . . . .	2.78	3.22	3.12	0.44	-0.10	16	- 3

Sources : Trade and Navigation Accounts of the United Kingdom ; *Statistique mensuelle du Commerce extérieur de la France* ; *Continental Iron and Steel Reports*, The Hague ; *Quarterly Bulletin of Steel Statistics*, Economic Commission for Europe.

NOTE. — Production figures are for hot-worked steel. Exports of the United Kingdom include pig-iron and certain manufactures of iron and

steel (about 615,000 tons in 1950). Exports of Belgium-Luxembourg include a small amount of pig-iron (about 27,000 tons in 1950). All exports include semi-finished steel, except for France-Saar.

<sup>a</sup> Production less exports.

<sup>b</sup> Including trade amongst the six countries.



the second half of 1950 as in the first, while other overseas importers obtained an increase in their supplies from this source of about one-sixth. Of the 1½ million tons increase in steel production in the second period, the United States and Canada took a still greater share (about one-third) thus increasing their supplies from these sources by about 1 million tons compared with the first half of 1950.<sup>1</sup> The smaller European countries also managed to obtain a share of the increase in supplies, but the primary producing countries outside North America not only received no share of the increase; they actually experienced, in the first half of 1951, an absolute reduction. Part of the explanation for this development is no doubt to be found in the fact that many of these countries habitually obtain the bulk of their imports from the United Kingdom, which in this period reduced total exports by 13 per cent. It is nevertheless notable that these overseas buyers were unable to augment purchases from other European suppliers sufficiently to compensate for the decline in British deliveries.

In face of rising demand, relatively modest increases in home supplies, and controlled home prices, there developed a severe condition of "excess demand" or quantitative shortage, in all four countries. In the United Kingdom, with its large armaments programme, home market supplies of finished steel in the first half of 1951 were only 5 per cent higher than in the first half of 1950. In France and western Germany, home supplies in the same period rose by 10 per cent and 20 per cent, respectively, but demand had clearly increased considerably more.

In western Germany and the United Kingdom, the steel works' own stocks of steel in all forms, which had been falling rapidly since the beginning of the post-Korean boom, continued to decline in 1951 up to the latest date for which figures are available. The quantitative importance of this factor in relation to supplies in these countries may be seen from the table at the top of the next column, where producers' stocks are expressed as a percentage of crude steel output at selected dates in 1950 and 1951.

Similar figures relating to stocks in Belgium and France are not available, but in Belgium the low level at which home prices have been controlled as contrasted to the high prices obtained for exports may

<sup>1</sup> The United States also imported small amounts of steel from the Netherlands and Italy.

*Producers' Stocks of Finished, Semi-finished and Ingot Steel; Percentage of Crude Steel Production<sup>a</sup> in the Preceding Quarter*

	United Kingdom	Western Germany
31 December 1949 . . . . .	27	53
30 June 1950 . . . . .	27	53
30 September 1950 . . . . .	27 <sup>b</sup>	41 <sup>b</sup>
31 December 1950 . . . . .	23	28
31 March 1951 . . . . .	20	36
30 June 1951 . . . . .	18	23
30 September 1951 . . . . .	16 <sup>b</sup>	23 <sup>b</sup>

Sources: Monthly Digest of Statistics. Die Eisen- und Stahlindustrie, Düsseldorf, 1951.

<sup>a</sup> The percentage is calculated from the actual weight of the stocks (whether ingots, semi-finished or finished) and of the production of ingots and steel for castings.

<sup>b</sup> To avoid the artificial influence of the seasonally low level of steel production in the third quarter, stocks at the end of that quarter are given as a percentage of production in the second quarter.

provide an explanation of the severe steel shortage which developed in that country in spite of the substantial increase in steel production. Export prices also rose considerably in relation to controlled home prices in the United Kingdom, western Germany and France, as may be seen in Chart 6. The differential movement of export and home market prices made export markets particularly attractive to producers, while Governments were slow to hold down exports by direct control.

In the latter part of 1951, however, three of the major producing countries took steps to protect home supplies. The United Kingdom cut export allocations for the second half of the year, so that exports fell by 22 per cent in the third quarter. Western Germany announced a 10 per cent reduction in export licences on 13 November, having already cancelled a little earlier its barter agreement for coal against steel with the United States Government. In the latter part of the year, French exports also began to decline, as a result of organized Government restriction, while production rose, thus relieving the pressure on the home market.

*The Scarcity of Raw Materials*

The increase in European output of crude steel in 1951 was accompanied by a striking shift in its distribution between countries. In 1950, nearly one-third of the western European total had come from the industry of the United Kingdom; western Germany had contributed less than one-fourth, and Belgium, Luxembourg, France and the Saar, taken together,



Table 22  
THROUGH-PUT OF STEEL-MAKING MATERIALS

Millions of tons and percentages

Annual totals or annual rates

	UNITED KINGDOM				WESTERN GERMANY				FRANCE-SAAR				BELGIUM-LUXEMBOURG			
	1937	1949	First half 1950	First half 1951	1937 <sup>a</sup>	1949	First half 1950	First half 1951	1937	1949	First half 1950	First half 1951	1937	1949	First half 1950	First half 1951
<b>Blast furnaces</b>																
Consumption of: iron ore <sup>b</sup>	21.76	20.20	20.66	20.71	21.40	22.16	10.38	12.22	14.89	15.14	27.55	23.95	26.12	17.99	12.59	16.97
scrap	0.33	0.81	0.92	0.88	0.71	0.71	1.70	2.03	1.57	1.13	1.13	1.61	1.39	0.56	1.30	1.89
coke	9.8	10.1	5.0	10.1	10.2	13.7	7.0	8.2	9.7	9.7	10.4	10.0	11.1	6.5	5.4	7.1
Production of pig-iron <sup>c</sup>	8.6	9.7	9.8	9.8	9.7	13.7	7.1	8.6	10.3	10.1	10.1	9.9	10.9	6.3	6.1	7.8
<b>Steel furnaces and converters</b>																
Consumption of: pig-iron <sup>c</sup>	6.4 <sup>d</sup>	7.4	7.8	7.7	8.3	11.9	6.0	8.4	9.6	9.9	8.7	8.7	9.4	6.2	6.1	7.8
scrap	7.70	9.93	10.42	9.84	6.74	6.74	3.96	5.42	5.79	5.79	2.84	3.24	4.01	0.83	0.81	1.10
Production of crude steel	13.19	15.80	16.89	16.22	16.57	17.48	9.16	11.40	12.84	12.88	10.26	10.91	12.27	5.87	6.14	8.05
<b>Percentages of:</b>																
Blast-furnace scrap consumption to pig-iron production	3.8	8.4	9.4	9.2	9.2	5.2	23.8	21.4	15.6	11.2	16.2	17.9	12.8	8.8	21.2	24.1
Steel furnace scrap consumption to crude steel production	57.6	62.8	62.9	59.4	38.6	43.3	44.7	44.7	44.9	27.7	29.7	31.5	32.7	14.1	13.2	13.7
Total scrap consumption <sup>e</sup> to crude steel production	60.1	67.9	68.5	64.7	42.6	61.9	61.4	61.4	57.1	38.7	44.4	47.5	44.0	23.6	34.4	37.2

Sources: Quarterly Bulletin of Steel Statistics, Economic Commission for Europe; Die Eisen und Stahlindustrie, Düsseldorf; and data supplied by the Steel Section, Economic Commission for Europe.  
<sup>a</sup> Pre-war area of Germany but excluding the Saar.  
<sup>b</sup> Except for Italy and Belgium-Luxembourg, including ore consumed in sinter plants; for Italy, including ore consumed in blast furnaces as sinter.  
<sup>c</sup> Including ferro-alloys.  
<sup>d</sup> Excluding ferro-alloys.  
<sup>e</sup> In blast furnaces and steel-furnaces.

about the same proportion as the United Kingdom.<sup>1</sup> By the third quarter of 1951, these shares had so changed that the United Kingdom and western Germany were now equal with one-fourth, while the other countries, having recovered from their slump, had increased their share significantly. The deterioration in the relative position of the United Kingdom was intimately bound up with developments in the supply of raw materials, for, as will be seen below, United Kingdom production was held down by the virtual cessation of its imports of German scrap. The development of the supply position may be further studied in the light of Table 22 showing the movement of raw materials through the steel industries of the four major western European producers, and Table 23 showing the contribution of domestic production and trade in the supply of these materials.

When there is a sudden increase in the demands placed on steel, much of the first shock falls on scrap: iron ore supplies cannot be quickly increased, as a rule, and, in addition, the scarcity of coking coal and coke tend to increase the pressure on scrap. In the first half of 1951, western European production of metallurgical coke was still slightly below that of 1937, although steel production had increased by one-fourth. "Bought scrap" (that is scrap which does not merely arise within the steel industry itself<sup>2</sup>) represents about two-thirds of total European scrap consumption;<sup>3</sup> in 1950, consumption of bought scrap was about 24 million tons in western Europe and the ratio of bought scrap consumption to crude steel production in western Europe had risen from about 30 per cent in 1937 to around 45 per cent. In post-war years a significant margin, of about one-tenth, of the total western European consumption of "bought" scrap has entered into intra-European trade.

In face of this structural background, it was inevitable that the upswing in demand for steel in western Europe between 1950 and 1951 should bring with it a particularly violent upswing in the demand for scrap. Supply, however, was heavily depressed by the drastic fall in the amount of "war" and other

scrap available in Germany, as illustrated by the following figures:

*Supplies of "Bought Scrap" in Germany*  
Thousands of tons

	Total Germany 1937 (Pre-war boundaries)	Western Germany only		
		1949	1950	1951 First half at annual rate
Estimated total supply of ferrous scrap from outside the steel in- dustry . . . . .	3,144	6,802	7,398	5,530
Of which net exports .	— 555	3,149	2,621	1,006

NOTE. — Basic data are derived from Tables 22 and 23; the estimates involve also the assumption that circulating scrap was 22 per cent of crude steel production in all periods. No allowance is made for consumption of ferrous scrap in iron foundries or elsewhere outside the steel industry.

It is hardly surprising, therefore, that, at the end of 1950 and the beginning of 1951, scrap markets in Europe became highly disorganized, free prices rose, and the level of intra-European trade in scrap was reduced. In Belgium and Luxembourg, prices which were uncontrolled rose above the controlled internal prices of certain semi-finished steel products. In France and western Germany, controlled internal prices were also raised, and in August the British internal price, which had only risen 19 per cent since 1938, was lifted by more than 50 per cent.

Three factors helped to alleviate the shortage. All countries put into operation more or less intensive collection drives for scrap and achieved varying success. From the second half of 1950 to the first half of 1951 bought scrap supplies from home sources actually fell in France and the Saar and increased by only about 600,000 tons, or 10 per cent, in the United Kingdom (where supplies may have been held back by a general anticipation of the rise in price which came later). In Belgium and Luxembourg, the results were better with a rise of nearly half-a-million tons, or 52 per cent; this relatively sharp increase is not surprising, as the price in these countries is now so high that premature "scrapping" of capital equipment is thought to be taking place. A second factor which helped the situation in 1951 appears to have been a slight falling off in United States imports of scrap from Europe coupled with a small increase in European imports from other overseas sources such as North Africa.

<sup>1</sup> In the period 1936-1938 the shares were: United Kingdom, one-fourth; the present area of the Federal Republic of western Germany, over one-third; Belgium, Luxembourg, France and the Saar, one-third.

<sup>2</sup> "Bought scrap" includes both the waste arising from current production in the steel processing industries and so-called "capital" scrap.

<sup>3</sup> Including scrap consumption in iron foundries and other industries.

Table 23  
SUPPLIES OF STEEL-MAKING MATERIALS

Millions of tons

Annual rates or annual totals

	PRODUCTION					NET EXPORTS (-) OR NET IMPORTS (+)					
	1949		1950		1951	1937		1949	1950		1951
			First half	Second half	First half				First half	Second half	First half
IRON ORE											
France-Saar <sup>a</sup>	37.84	31.41	29.22	30.74	34.32	-18.40	- 6.84	-6.77	-7.98	- 9.84	
Western Germany <sup>b</sup>	7.52	7.20	8.70	10.52	10.57	+20.62	+ 4.52	+2.82	+6.82	+ 4.63	
Italy	1.02	0.55	0.49	0.44	0.47	+ 0.18	+ 0.11	+0.11	+0.24	+ 0.29	
Belgium-Luxembourg	8.03	4.18	3.63	4.06	4.77	+10.13	+ 6.78	+7.02	+8.88	+10.94	
United Kingdom	14.44	13.61	13.20	13.09	14.67	+ 7.15	+ 8.84	+8.62	+8.48	+ 7.37	
Sweden <sup>c</sup>	14.95	13.73	13.06	14.79	16.12	{ -13.58 - 0.38 }	{ -10.58 - 2.20 }	{ -10.89 - 2.06 }		{ - 9.06 - 3.02 }	
COKE-OVEN COKE											
France-Saar	10.7	10.4	10.2	10.9	11.9	+ 3.4	+ 3.6	+2.1	+2.2	+ 3.1	
Western Germany	34.5	25.1	25.9	28.8	32.0	-10.6 <sup>d</sup>	- 7.7	-6.6	-9.6	- 9.4	
Belgium-Luxembourg	6.3	5.0	4.5	4.7	5.9	+ 1.9	+ 1.9	+1.6	+2.5	+ 2.8	
Netherlands	3.4	2.5	2.7	2.9	2.9	- 2.0	- 0.9	-0.9	-1.0	- 1.1	
United Kingdom	15.2	15.7	15.6	15.7	16.2	- 2.4	- 0.6	-0.8	-0.8	- 0.2	
Italy	1.7	1.4	1.3	1.4	1.8	+ 0.4	- 0.1	-	-	-	
Sweden	0.1	0.1	0.1	-	-	+ 2.3	+ 1.9	+2.1	+2.6	+ 2.5	
SCRAP <sup>e</sup>											
Belgium-Luxembourg	1.60	1.81	1.59	2.03	2.73	- 0.22	+ 0.30	+0.38	+0.34	+ 0.26	
France-Saar <sup>a</sup>	3.49	5.01	5.47	5.47	5.64	- 0.12	- 0.17	-0.28	-0.65	- 0.24	
Western Germany <sup>b</sup>	7.50	8.82	10.02	10.10	8.36	+ 0.56	- 3.15	-2.90	-2.34	- 1.01	
Italy	1.09	1.49	1.71	1.71	1.88	+ 0.54	+ 0.39	+0.47	+0.54	+ 0.76	
Netherlands	..	0.46	0.62	0.70	0.50	- 0.47	- 0.03	-0.11	-0.18	- 0.02	
Sweden	0.59	0.75	0.80	0.77	0.31	+ 0.09	+ 0.15	+0.14	+0.19	+ 0.07	
United Kingdom	7.19	8.78	9.22	9.49	10.18	+ 0.74 <sup>f</sup>	+ 1.96 <sup>g</sup>	+2.42 <sup>g</sup>	+1.55 <sup>g</sup>	+ 0.54 <sup>g</sup>	
Other Western Europe <sup>h</sup>						- 0.24	+ 0.12	+0.13	+0.04	+ 0.06	
Total Western Europe <sup>h</sup>						+ 0.88	- 0.43	+0.25	-0.51	+ 0.42	

<sup>d</sup> Including 3 million tons estimated trade with the rest of Germany.  
<sup>e</sup> "Production" of scrap refers to consumption in blast-furnaces and steel works, less imports or plus exports.

<sup>f</sup> Including ships for breaking up.

<sup>g</sup> Provisional figures which include all Government stores but exclude all materials ultimately found to be re-usable.

<sup>h</sup> Excluding Finland.

Sources: *Quarterly Bulletin of Steel Statistics*, Economic Commission for Europe; *Die Eisen- und Stahlindustrie*, Düsseldorf; *Monthly Bulletin of Coal Statistics*, Economic Commission for Europe and data supplied by the Steel Section, Economic Commission for Europe. See also "Notes to the Statistics".

<sup>a</sup> Excluding the Saar pre-war.

<sup>b</sup> All Germany (including the Saar) pre-war, U.K./U.S. Zone to September 1949 and the three western zones of Germany from October 1949.

<sup>c</sup> The first export series relates to Swedish exports to Europe and the second to overseas countries.

The third and most important factor which helped alleviate the shortage of steel-making raw materials in 1951 was that, in the event, European output of iron ore did in fact rise substantially (Table 23). In the first half of 1951, total production of all types of iron ore in France increased by 12 per cent (actual weight) over the second half of 1950,<sup>1</sup> although the level reached was still one-tenth below 1937 and about one-third below 1929. French exports will probably show an increase of about 40 per cent in the whole year 1951 over 1950. Ore production also increased in the United Kingdom and in western Germany, where the shortage and high price of imported ore led to suggestions for making more use in the Ruhr of Salzgitter ores. Swedish production in the first half-year was 23 per cent above the level of the first half of 1950. In Belgium-Luxembourg, there was an acute shortage of ore throughout the year, although these two countries secured about the whole of the substantial increase in French exports between the second half of 1950 and the first of 1951: the extent of this shortage is indicated by the sharp increase in the output of Luxembourg ore,<sup>2</sup> much of which is of such poor quality that it is worked only in times of acute scarcity. It was the shortage of ore, more than anything else, which drove these countries' scrap market into such an inflated condition. Belgium-Luxembourg was the only region in western Europe where the scrap ratio in blast-furnaces in 1951 rose; in all other countries listed in Table 22 the ratio fell significantly.

#### *Raw Material Supplies and Steel Production in Individual Countries*

In the United Kingdom, between the first half of 1950 and the first half of 1951 there was a slight increase in supplies of ore, a decline in imports due to the shipping shortage being offset by a rise in home production. The increased use of lean home ores considerably stepped up the amount of coke required to produce a given tonnage of pig-iron; coke supplies were, however, inadequate and production of pig-iron in the first half-year remained at the level of 9.7 million

tons per annum where it had been stagnating since 1949.<sup>3</sup> At the same time, the United Kingdom was virtually cut off from its invaluable post-war source of scrap supplies in western Germany, and its total crude steel production fell.

Even had coke and ore supplies been unlimited, it is doubtful whether pig-iron production in the United Kingdom could have been more than half-a-million tons greater (annual rate) in the first half of the year than it actually was. The basic problem in the United Kingdom at the end of 1951 was that steel-furnace capacity—possibly because of the earlier availability of western German scrap—had been pushed ahead of blast-furnace capacity, so that the one is now some 30 per cent above 1937 while the other had increased by no more than 20 per cent. The position will not be rectified until the one million tons of blast-furnace capacity now under construction has been brought into full production. In addition a further half-million tons will then be needed to meet the targets of the revised long-term production plan. The plan calls for an annual rate of ingot production of some 18 million tons, a rate which was nearly reached at one time in 1950. In the first half-year 1951, production had fallen to 16½ million tons, and it is unlikely that steel production in the United Kingdom will be able to recover rapidly in the immediate future unless supplies of scrap are partially restored.

In western Germany, events moved so rapidly that by the third quarter of 1951—at a time of year when production in most countries suffers a seasonal fall—crude steel production was running at an annual rate of no less than 14 million tons compared with an average of 13 millions in the first half-year. This was achieved partly by raising iron-ore production and iron-ore imports<sup>4</sup> and partly by raising the proportion of the total supply of bought scrap retained for home consumption: 90 per cent of the total scrap bought outside the steel industry was retained at home in the third quarter compared with 80 per cent in the first half-year.

<sup>1</sup> As can be seen in Table 23, this is equivalent to 3½ million tons of ore in a whole year. Comparison with the first half of 1950 is less valid because of the slack demand for steel products in France at that time and because ore production increased very little between the first and second halves of that year.

<sup>2</sup> Production of ore in Luxembourg in August 1951 reached a level 66 per cent above August 1950.

<sup>3</sup> In 1950, more coke had been available for part of the year than the steel industry demanded; at that time, when steel markets were becoming very competitive, it had no doubt been desired to reduce costs by making maximum use of the then adequate supply of scrap.

<sup>4</sup> Ore production in the third quarter ran at an annual rate of 11.6 million tons compared with 10.5 millions in the first half-year. Ore imports, which are highly seasonal, were more than one-fourth greater than in the third quarter of 1950.



**Table 24**  
**STEEL PRODUCTION AND CONSUMPTION OF RAW MATERIALS**  
**IN EASTERN EUROPEAN COUNTRIES <sup>a</sup>**

*Millions of tons*

	1936-1938	1950	1951 Plans	1951 Estimated result
Crude steel production . . . . .	6.0	8.1	9.6	9.3
Total pig-iron and scrap consumption . . . . .	6.6	8.9	10.5	10.2
of which :				
Metal content of ore <sup>b</sup> . . . . .	2.2	2.8	3.4	3.0
Circulating scrap . . . . .	1.3	1.8	2.1	2.0
Other scrap <sup>c</sup> . . . . .	3.1	4.3	5.0	5.2
Pig-iron production . . . . .	3.1	4.7	5.3	4.9
Over-all scrap ratio <sup>d</sup> . . . . .	73	75	74	77

*Sources: Quarterly Bulletin of Steel Statistics, Economic Commission for Europe and plan reports.*

*NOTE. — In arriving at estimates, the following technical coefficients were used: total consumption of pig-iron and scrap, 109 per cent of crude steel output; scrap consumption in blast-furnaces, 7 per cent of pig-iron production; circulating scrap, 22 per cent of crude steel production. After 1950, the constancy in the implied figure for consumption of pig-iron outside steel furnaces is no more than a working hypothesis and the scrap requirements are derived as a residual. (See *b*)*

<sup>a</sup> Czechoslovakia, eastern Germany (post-war area), Hungary, Poland (post-war area) and Rumania.

<sup>b</sup> And other materials, except scrap, used in making the pig-iron consumed in steel furnaces. The difference between this series and the series for pig-iron production is due mainly to the consumption of pig-iron in foundries, etc., trade in pig-iron and the consumption of scrap (6 to 8 per cent of pig-iron production) in blast-furnaces.

<sup>c</sup> Including scrap consumed in blast-furnaces.

<sup>d</sup> Percentage of total scrap consumption to crude steel production.

In France and the Saar, production of steel ingots rose to an all-time record annual rate of 12.3 million tons in the first half of 1951—that is, 20 per cent above 1937; in France alone the rate of production was at last slightly higher than in 1929. This increase was achieved by means of increased home production and increased imports of coke, reduced net exports of scrap and, as already seen, an increase in the production of ore sufficient to allow a substantial expansion of both home consumption and exports. The over-all scrap ratio in France and the Saar fell from 47½ per cent in 1950 to 44 per cent in the first half of 1951. As the year 1951 progressed, however, French production appeared to stagnate, apparently for lack of coke. French coke-ovens had reached the limit of their capacity so that, despite the increased imports from western Germany, total coke supplies were inadequate to support a significant rise in steel production. Later, in October, French production of crude steel again pushed upwards, and this higher rate was maintained in November.

#### *The Steel and Engineering Industries of Eastern Europe*

In the planned economies of eastern Europe, the output of the heavy industries is almost entirely deter-

mined by the supply and efficiency of the various factors of production and is not subject to cyclical fluctuations in demand. Hence, for these countries, it is more relevant to begin with steel production before considering developments in the field of engineering. Table 24 provides a picture of the over-all balance between material supplies and steel production in Czechoslovakia, eastern Germany, Hungary, Poland and Rumania, taken as a whole. Many of the figures are necessarily estimates, but given what is known about the general structure of the steel industries in these countries, the margins of error are probably not so great as to invalidate analysis. It will be seen that, unlike the development in western Europe, these countries have not significantly increased their already heavy dependence on scrap since before the war. In fact, pig-iron production in 1950 was more than 50 per cent greater than in 1936-1938 compared with an increase of about 35 per cent in crude steel output. The over-all scrap ratio in steelmaking did not change greatly, presumably because a larger proportion of pig-iron was being used in foundries and there had been changes in the pattern of trade.<sup>1</sup> These countries

<sup>1</sup> It is reported that Poland is exporting pig-iron to the Soviet Union and eastern Germany, but no information about the quantities is available; the Soviet Union in turn exported to eastern Germany.



had planned to increase their crude steel production in 1951 by a further 17 per cent, but pig-iron production was due to rise by only 13 per cent. The plans thus implied the collection of an additional 700,000 tons of ferrous scrap from outside the steel industry. Since net imports into the area were likely to fall, the total increase in "bought" scrap supplies required from within the area might have been as much as 25 per cent.

From Plan Fulfilment Reports so far published, it seems likely that some three-fourths of the planned increase in crude steel production may, in fact, have been achieved; the extra 700,000 tons of scrap appear to have been found,<sup>1</sup> but there was substantial "under-fulfilment" of production plans for pig-iron. These countries have experienced some of the same difficulties in pig-iron production as those which arose in, for example, the United Kingdom. In particular, coal production fell in the Ostrava districts of Czechoslovakia, which are responsible for a major part of that country's supplies of coke; Czechoslovakia supplies the Polish steel industry with part of its coke and there developed a severe shortage of coke throughout the whole area. The consequent shortage of steel was most marked in Czechoslovakia itself, where, as can be seen from Table 25, crude steel production in 1951 was running at a level no more than 9 per cent higher than in the previous year. In spite of steel imports from the Soviet Union the steel shortage prevented the fulfilment of the production plans in the heavy industries of Czechoslovakia and, in the third quarter of 1951, engineering production was only 8 per cent above the corresponding period of 1950 as against a rate of increase of 20 per cent or more in the previous period: output per man-year in heavy industry as a whole in the third quarter fell significantly below the level of twelve months previously.<sup>2</sup> On 9 November, the Government announced a special decree aimed at improving the productivity of the steel industry: work norms were increased by 15 per cent, a more differentiated wage structure was introduced, and a new system of technical control established.

In Poland, crude steel and engineering production seems, on the whole, to have reached the levels planned (in the case of steel, a 9 per cent increase over 1950) but apparently not without considerable

effort and difficulty. In Poland, as in Hungary, the rate of expansion of the steel and engineering industries taken together has considerably exceeded the rate of expansion in steel production during the last three years. In Hungary, light engineering products such as electrical equipment take a heavy share in engineering production and no great parallel between the index numbers could therefore be expected. In Poland, heavy engineering is much more important than in Hungary and the pattern of engineering production seems in latter years to have shifted towards heavier products. Although stocks might have been drawn down, it does not seem probable that this could explain much of the discrepancy between the index numbers over so long a period. A more important explanation may be that post-war reconstruction in this period had reached a stage where proportionately less steel was needed for rails, coal mines and building, so that the greater part of the increased steel supplies was available for the engineering industry. Furthermore, Polish steel exports in 1949, the last year for which figures are available, amounted to about 325,000 tons or some 15 per cent of production. Although it is reported that Poland in 1951 exported steel to eastern Germany, total steel exports from Poland have probably declined.

In eastern Germany, production of steel ingots in 1951 seems likely to turn out as planned, nearly 60 per cent above 1950 output, but still slightly below

<sup>2</sup> This appears from figures given in quarterly Plan Fulfilment Reports, although care is required in interpreting these reports because index numbers for earlier periods appear by implication to have been revised in reports published later. No details of these revisions are given however. Thus:

*Industrial Production and Employment in Czechoslovakia in 1951  
(Index numbers corresponding period of 1950 = 100)*

Report published on	Production <sup>a</sup>			Employment		Apparent output per man-year	
	29 July	3 Nov.		29 July	3 Nov.		
Period covered	First half-year	Third qtr.	First 9 months	First half-year	Third qtr. <sup>b</sup>	First half-year	Third qtr.
<i>Industry groups:</i>							
Heavy industry	115	111	116	112	115	103	96
Light industry	105	105	104	101	98	104	107
Food processing	120	115	127	113	108	106	106
Total	113	111	114	108	107	104	104

Source: Rudé Právo.

<sup>a</sup> It is apparent that the index numbers for production in the first 9 months, published on 3 November, are not consistent with the index numbers for the third quarter, published on the same date, unless the index numbers published on 29 July have been revised upwards.

<sup>b</sup> 30 October 1951 compared with 30 October 1950. No figure is given for average employment in the first nine months compared with the same period in 1950.

<sup>1</sup> While supplies of war scrap, as previously mentioned, are nearing exhaustion in western Germany, there are indications that this is far from the case in eastern Germany.

Table 25

ENGINEERING PRODUCTION BY MAIN BRANCHES IN CZECHOSLOVAKIA, POLAND,  
EASTERN GERMANY AND HUNGARY

Index numbers—corresponding period of previous year = 100

	1949	1950 Whole year	1951			
			Three quarters	First quarter	Second quarter	Third quarter
<i>Czechoslovakia</i>						
Steel metallurgy . . . . .	109 <i>a</i>	109 <i>a</i>	109 <i>a</i>	109 <i>a</i>	111 <i>a</i>	107
All engineering branches . . . . .	112	122 *	117 *	122 *	120 *	108 *
Heavy engineering . . . . .	123	127	115 *	122	120	104 *
Motor vehicles and aircraft . . . . .	111 <i>b</i>	112	125 *	132	130	109 *
Precision engineering <i>c</i> . . . . .	..	120	104 *	109	103	99 *
General engineering . . . . .	..	127	124 *	126	126	119 *
<i>Poland</i>						
Steel metallurgy . . . . .	118	109	109	108	111	108
Ministry of heavy industry <i>d</i> . . . . .	124	124	119	119	121	117
<i>Eastern Germany</i>						
Steel metallurgy . . . . .	215	165 *	158 *	164 *	158 *	153 *
All engineering branches . . . . .	140	139 *	128 *	136 *	136 *	123 *
Mechanical engineering . . . . .	..	138 *	129 *	142 *	134 *	123 *
Electrical goods and apparatus . . . . .	..	143 *	109 *	104 *	128 *	110 *
Precision mechanics and optics . . . . .	..	129 *	173 *	172 *	181 *	168 *
<i>Hungary</i>						
Steel metallurgy . . . . .	116	120	118	118	116	120
Engineering . . . . .	144	142	148	147	149	149

Sources: Plans, plan fulfilment reports and *Pour une paix durable, pour une démocratie populaire*, Bucarest, 12 January 1951.

NOTE. — The estimates (\*) are based on the relation between percentage increases foreseen in the plan and the announced percentages of over- or under-fulfilment of the plans, on the assumption that plans announced for whole-yearly or half-yearly periods intended a constant rate of increase in production through the constituent quarters. The "all engineering branches" indices for Czechoslovakia for 1950 and 1951 are estimated as the arith-

metic average of the official indices for the four separate branches.

*a* All manufacture of metals. Non-ferrous metals are of minor importance.

*b* Computed from the index of motor vehicles production.

*c* According to the Czechoslovak nomenclature, this index also includes certain light machinery.

*d* Including both the manufacture of metals and engineering production but excluding mining.

the pre-war level; the increase in engineering production was only half that rate. In 1950, eastern Germany had been heavily dependent on imports of steel: it was reported that 250,000 tons were obtained from the Soviet Union in the first eight months of the year, and it is known that substantial quantities were obtained from Poland and from western Germany. Although no figures for 1951 have been published, it is reported that steel was again imported from Poland and, in substantial quantities, from the Soviet Union; but total imports probably declined following the decline in imports from western Germany.

While steel production in eastern Germany, both in 1951 and before the war, accounted for less than one-tenth of steel production in Germany as a whole, eastern Germany's share in total German engineering

production before the war was by no means inconsiderable, and during the war the Nazi Government pursued a deliberate policy of transfer from west to east in the hope of avoiding air attack.<sup>1</sup> As in western

<sup>1</sup> Both these facts are illustrated by the following figures:

Share of Eastern Germany in Total German Production *a*  
Percentages

	1936	1943
Internal combustion engines <i>b</i> . . . . .	6.2	20.7
Steam turbines <i>b</i> . . . . .	10.4	18.1
Machine tools . . . . .	34.4	34.7
Textile machinery <i>b</i> . . . . .	66	65.8
Motor trucks . . . . .	30.3	..
Transformers above 20 kW . . . . .	37.6	..
Electric bulbs . . . . .	29.5	41.4

Sources: German censuses of production.

*a* The figures compare the production of the present area of eastern Germany, including east Berlin, with the production in 1936 and 1943 of the area of the German State in 1936.

*b* Excluding east Berlin. The 1936 production of these commodities in east Berlin was in all cases less than 1 per cent of the German total.

Germany, the end of the war found this considerable industry shattered and dislocated and, soon after, capacity was further reduced by dismantling. A substantial number of skilled workers became idle or found employment elsewhere: later—and this was also true in Poland—it was possible to reabsorb these workers and thus permit rapid increases in output once the supply of other factors of production was restored. The results can be seen in Chart 5 above, which, along with that of main producers in western Europe, depicts the curve of engineering production in eastern Germany. It will be seen that, by and large, the speed of recovery in recent years has been about similar in magnitude to that in Western Germany—the two curves run largely parallel. On both sides of the inter-zonal frontier, the very high rates of increase in production began to decline in 1951: in eastern Germany, the future must depend very largely on progress made in solving the problem of steel supplies.

#### *Recent Revision of the Long-term Plans*

The role of the engineering industries is of supreme importance in the official long-term economic plans for the industrialization of eastern European countries. Since the middle of 1950, the original plans have been going through a process of extensive revision intended to place even greater general emphasis on heavy industry. It appears from an examination of the new plans that the specific objectives are to provide greater supplies of steel, to provide for more regional specialization in particular branches, and to provide for the production of greater supplies of investment goods and armaments.<sup>1</sup> This has meant considerable upward and downward revision of targets for individual items<sup>2</sup> and the development of a new pattern of trade agreements.

Table 26 shows how the new plans raised the targets for production of pig-iron and steel in order to provide an adequate basis for the further increases now planned in engineering production. In Czechoslovakia, the targets for both steel and engineering in 1953 were raised by some 20 per cent, but within the engineering total the target for heavy engineering was raised by 50 per cent. In this industry much of the expansion should be made possible by better

utilization of capacity already existing in the industry, but the expansion in steel requires the construction of substantial amounts of new plant. Steel capacity is in fact planned to increase by 42 per cent between 1950 and 1953, whereas, in the same period, the quantum of plant and equipment in the engineering industry is intended to be increased by only 12 per cent.

In eastern Germany, the pig-iron target has been raised by 60 per cent, while the targets for crude steel and engineering have hardly been altered. These changes have doubtless been made because of anticipated depletion of supplies of war scrap in eastern Germany and a desire to make eastern Germany less dependent on imports of pig-iron from the Soviet Union.

In Hungary, the plan revisions raise the 1954 targets for both pig-iron and steel production by about 35 per cent, but at the same time the target for engineering has been more than doubled. Hungary is to increase its specialization in light engineering and thus will not necessarily become dependent on steel imports: the Hungarian target for electrical equipment and apparatus was trebled, while the target for "other engineering" was raised by 75 per cent.

All the new plans for the engineering industries raise the targets for enterprises producing equipment for the mining, steel and building industries, and all step up the target for road vehicles. On the other side of the picture, targets for agricultural machinery and tractors were generally lowered, although in Czechoslovakia there is to be greater production of heavy tractors; the increases planned remain, however, substantial.<sup>3</sup> Czechoslovakia will continue to produce a wide range of industrial machinery. As mentioned above, the share of heavy engineering in total engineering production is to be considerably increased, and heavy engineering products are now to be produced in other branches of the engineering group. Eastern Germany is to share with Czechoslovakia the main responsibility for supplying the whole area with heavy electrical equipment, mining and foundry equipment, chemical machinery and heavy machine-tools. In the field of railway wagons, Poland provides a particularly interesting example of specialization; Polish targets for the production of wagons were considerably stepped up and those for eastern Germany reduced.

<sup>1</sup> See also Chapter 4.

<sup>2</sup> As the over-all targets are being stepped up, there are more and greater upward than downward revisions.

<sup>3</sup> Comprehensive details about the plan revisions for Poland are not available, but these generalizations appear to be true for Poland also.

Table 26

REVISIONS OF THE LONG-TERM PLANS FOR THE ENGINEERING AND STEEL INDUSTRIES  
OF CZECHOSLOVAKIA, EASTERN GERMANY AND HUNGARY

	Value or quantity	Index numbers				
		Final year of plan = 100		Actual production in the base year = 100 a		
	Unit	Initial plan	Revised plan		Initial plan	Revised plan
<i>Czechoslovakia—1953</i>						
Pig-iron . . . . .	Million tons	2.7	..	..	159	..
Crude steel . . . . .	Million tons	3.5	4.3	123	130	159
All engineering branches . . . . .	Billion korunas	92.3	110.4	120	193	231
Heavy engineering . . . . .	Billion korunas	22.4	33.1	148	238	352
Motor vehicles and aircraft . . . . .	Billion korunas	15.4	77.3	149 <sup>b</sup>	169 <sup>b</sup>	252 <sup>b</sup>
Other engineering branches . . . . .	Billion korunas	54.5				
<i>Eastern Germany—1955</i>						
Pig-iron . . . . .	Million tons	1.25	2.00	160	371	594
Crude steel . . . . .	Million tons	3.00	3.10	103	303	313
All engineering branches . . . . .	Billion DM	11.25	11.58	103	205	211
Power plants . . . . .	..	..	..	215	284	610
Metallurgical and mining equipment . . . . .	Thousand tons	..	224.60	..	136 <sup>c</sup>	271
Railway wagons . . . . .	Thousand wagon units	13.00	..	72	250	179
Railway carriages . . . . .			..	85	273	231
Lorries . . . . .	Thousands	24.00	59.00	246	1,000	2,460
Tractors . . . . .	Thousands	12.00	11.00	92	232	213
Agricultural machines . . . . .	Billion DM	0.162	0.102	63	245	154
<i>Hungary—1954</i>						
Pig-iron . . . . .	Million tons	0.96	1.28	133	240	320
Crude steel . . . . .	Million tons	1.60	2.20	138	186	256
All engineering branches . . . . .	Billion forints	11.59	25.25	218	225	490
Hardware, precision mechanics, electrical equip- ment and apparatus . . . . .	Billion forints	4.00	12.00	300	167	500
Other engineering branches . . . . .	Billion forints	7.59	13.25	175	276	481

Sources: Plan documents and official statements.

<sup>a</sup> The base years are those preceding the first year of the plan—i.e., in Czechoslovakia 1948, in eastern Germany 1950, in Hungary 1949. The values given in national currencies are expressed in prices of the base year.

<sup>b</sup> Motor vehicles only.

<sup>c</sup> Metallurgical equipment only.

In fact, it seems that Poland manufactured in 1951 a quantity of wagons little smaller than did the United Kingdom.<sup>1</sup>

Statistical details of the trade agreements which follow these revisions have not been published; it has, however, been estimated that, already in 1951, the share of engineering in total exports from eastern

<sup>1</sup> Cf. Tables 17 and 27.

Germany rose to 45 per cent compared with 30 per cent in 1950 and it is known that in Czechoslovakia the proportion should reach 50 per cent in 1953. The engineering exports of Czechoslovakia are stated to be entirely intended for the Soviet Union, other eastern European countries and China. It is also known that "more than half" of the planned production in 1953 of each of the following branches or commodities is to be exported: in Czechoslovakia,



heavy engineering, machine tools and road vehicles ; in eastern Germany, heavy engineering, heavy electrical equipment and precision instruments.

*Production Results in the Engineering Industries of Eastern Europe in 1951*

Table 27 summarizes the information at present available, concerning the progress of production for individual engineering commodities or commodity groups. These statistics are derived from reports about plan fulfilment which are published periodically during the year. The figures for individual commodities are normally quoted as examples of cases where plans have gone well and do not seem to be intended to be representative of the whole field. This no doubt explains why the index numbers for most of the individual commodity groups in the table are higher than the over-all index numbers given in Table 25.<sup>1</sup>

There can be little doubt that the process of conversion to the revised plans has meant some initial retardation of the general rate of expansion. It is therefore important to examine the actual achievements depicted in Tables 25 and 27 and the qualitative information available from published reports, against the background of the revisions : there appear numerous cases where considerable difficulties are being met in achieving the particularly ambitious rates of expansion now planned. Thus, although heavy engineering in Czechoslovakia during the first nine months of 1951 reached a level of production 15 per cent above the first nine months of 1950, the industry was repeatedly admonished in the quarterly reports of 1951 for failing to achieve its target rates of output and thus prejudicing export commitments to the Soviet Union and other eastern European countries. Among individual commodities in Czechoslovakia, plans were not fulfilled for the production of cranes, dredgers, turbines, steam boilers and locomotives, and in eastern Germany for diesel engines, steel-making equipment and heavy electric motors. Machine-tool production in eastern Germany in the third quarter was more than twice as great as in the third quarter of 1950 and in Hungary also, in 1951, machine-tool production rose by nearly 70 per cent. But the most important machine-tool producer, Czechoslovakia, lagged behind plans,

especially in the field of heavy machine-tools, and issued no figures for production in this branch.<sup>2</sup>

On the other side of the picture there are a number of cases where production has been increasing satisfactorily according to plan. As might be expected, where the revisions placed particular emphasis on traditional branches, the targets were easier to meet. Thus, in 1951, plans were fulfilled for general engineering production in Czechoslovakia and for precision machinery and optics in eastern Germany ; the actual increases in production recorded for these branches on a nine-months basis were 24 and 73 per cent respectively. The upward revision of plans for motor vehicles production also appeared to meet with success : in the four countries listed in Table 27 production of trucks either doubled or trebled in 1951, and total output of the group as a whole is now approaching about 60,000 units per annum, compared with a current production of about 120,000 units in the United Kingdom.<sup>3</sup> The slight acceleration in the rate of increase of production of electrical machinery in both eastern Germany and Hungary may also represent the result of decisions already noted to revise upwards the targets for these branches in these two countries.

Examples of the effects of downward revision of the plans, on the other hand, are more difficult to find in the statistical material at present available : in the most outstanding instance—agricultural tractors—neither Poland nor eastern Germany has issued statistical reports since the first quarter of 1951. However, Hungary reported agricultural tractor production in the first nine months of the year only 8 per cent above the first nine months of 1950, compared with an increase of 51 per cent in that year. Production of heavy tractors in Czechoslovakia, on the other hand, more than doubled, but production of light tractors declined.

*The Coal Shortage in 1951*

In both eastern and western Europe in 1951 there was a considerable excess of demand over the supply of domestically produced hard coal. Table 28 shows that production increased by 3 per cent in

<sup>2</sup> The latest figures available relate to 1948.

<sup>3</sup> The United Kingdom figure refers to all commercial vehicles from  $\frac{3}{4}$  to 6 tons carrying capacity and therefore includes such items as delivery wagons which may not be included in the eastern European figures.

<sup>1</sup> Except for Hungary in 1951, where with only three exceptions they are considerably lower.



Table 27

OUTPUT OF SELECTED ENGINEERING PRODUCTS IN CZECHOSLOVAKIA, POLAND, EASTERN GERMANY AND HUNGARY  
*Quantities, values and index numbers—corresponding period of previous year = 100*

	Quantitative units	CZECHOSLOVAKIA		POLAND		EASTERN GERMANY		HUNGARY	
		1950	1951	1950	1951	1950	1951	1950	1951
		Quantities	Index numbers	Quantities	Index numbers	Quantities	Index numbers	Quantities	Index numbers
<b>Power and General</b>									
Electric generators . . . . .	Thousands	..	..	..	108 (3)	..	132 <sup>c</sup>	..	149
Electric motors . . . . .	Thousands	448.00 <sup>a,b</sup>	..	..	..	..	..	..	..
Transformers . . . . .	Thousands	..	123 (3) <sup>d</sup>	..	..	..	..	..	..
Ball bearings . . . . .	Thousands	..	122 (3)	302	302	160	..	..	..
<b>Industry</b>									
Mining equipment . . . . .	Thousand tons	..	177 (3) <sup>e</sup>	..	134 (1)	82.80	113 (1)	..	..
Machine tools . . . . .	Thousands	11.81 <sup>a</sup>	..	129	123	8.65 <sup>f</sup>	233 (3) <sup>g</sup>	1.87 <sup>a</sup>	167 <sup>g</sup>
Chemical equipment . . . . .	Thousands	..	..	..	165 (1)	..	..	..	..
Textile machinery . . . . .	Thousands	..	..	..	102 (1)	..	..	..	..
Building machinery . . . . .	Million DM	..	..	..	229 (2)	69.7	..	..	..
<b>Transport</b>									
Locomotives . . . . .	Number	..	..	106	126	..	..	269	113
Wagons . . . . .	Thousands	11.00 <sup>a,h</sup>	196 (3)	15.74	102	4.96 <sup>f,h</sup>	140	4.55	82
Trucks . . . . .	Thousands	16.40 <sup>i</sup>	207	..	309	2.40 <sup>f</sup>	271	8.72	261
Other transport and loading equipment . . . . .	Million DM	..	..	..	..	165.50	134 (1)	..	..
<b>Agriculture</b>									
Tractors . . . . .	Thousands	12.00	237 <sup>j</sup>	3.91	160	5.40 <sup>f</sup>	145 (1)	5.10	151
Other agricultural machinery	Thousands tons	..	132 <sup>k</sup>	39.65	119	66.10 <sup>l</sup>	140 (1)	..	..
<b>Consumers and Commerce</b>									
Motor-cars . . . . .	Thousands	..	..	..	..	10.00 <sup>f</sup>	236 (1)	..	..
Motor-cycles . . . . .	Thousands	68.00 <sup>a</sup>	107	7.14	170	..	226	16.23	126
Bicycles . . . . .	Thousands	231.50 <sup>a</sup>	..	98.96	109	..	..	239.37	114
Radio sets . . . . .	Thousands	267.70 <sup>a</sup>	110	116.11	176	..	..	..	143
Sewing machines . . . . .	Thousands	104.10 <sup>a</sup>	125	..	..	..	..	..	148

Sources: For the index numbers, plan fulfilment reports. For output in quantitative units, the following sources:

Czechoslovakia: *Industrial Reports*, Prague, 1948, No. 28-29, pages 186-188. Poland: *Wzrost gospodarki*, Warsaw, 1951, No. 4, pages 46, and plan fulfilment reports; Hungary: Plan documents and plan fulfilment reports; eastern Germany: Plan documents.

NOTE: — If not otherwise stated, the 1951 index numbers refer to the first 9 months of the year. They represent the arithmetic average of the separate percentage increases in each of the first three quarters of the year. When data are not available for all three quarters, the figures in parentheses following the index number shown indicates the quarter or quarters to which it relates.

<sup>a</sup> Refers to 1948.

<sup>b</sup> Below 25 kW.

<sup>c</sup> Above 10 kW.

<sup>d</sup> Above 5,000 kW.

<sup>e</sup> Mining conveyors.

<sup>f</sup> Planned output.

<sup>g</sup> Lathes.

<sup>h</sup> Wagons and carriages.

<sup>i</sup> Including motor-cars in terms of motor-truck units.

<sup>j</sup> Above 60 hp.

<sup>k</sup> Threshing machines.

<sup>l</sup> Million DM.

It has been reported that plans were not fully implemented for trucks and motor-cars.

**Table 28**  
**PRODUCTION, TRADE <sup>a</sup> AND AVAILABLE SUPPLIES OF HARD COAL**  
*Millions of tons*

Year	UNITED KINGDOM <sup>b</sup>				OTHER WESTERN EUROPE					EASTERN EUROPE <sup>c</sup>		
	Production	Exports	Imports	Available supplies	Production <sup>d</sup>	Net imports from United Kingdom	Imports from Eastern Europe	Net imports from other countries	Available supplies	Production	Exports to western Europe	Available supplies <sup>e</sup>
1946 . .	193	5	—	188	158	4	4	14	180	66	4	62
1947 . .	201	1	1	201	180	1	7	34	222	81	7	74
1948 . .	213	11	—	202	199	8	11	18	236	93	11	82
1949 . .	219	14	—	205	227	11	12	10	260	97	12	85
1950 . .	220	14	—	206	236	11	11	—	258	101	11	90
1951 . .	226	8	1	219	252	7	10	25	294	106	10	96

Sources: *Economic Survey of Europe in 1948 and 1950*, Economic Commission for Europe; *Monthly Bulletin of Coal Statistics*, Economic Commission for Europe, and national trade statistics.

<sup>a</sup> Excluding bunker coal.

<sup>b</sup> Excluding Northern Ireland.

<sup>c</sup> Excluding the U.S.S.R.

<sup>d</sup> Including German pitch coal.

<sup>e</sup> Including supplies to the U.S.S.R. of approximately 8 to 9 million tons a year.

the United Kingdom, by 4 per cent in eastern Europe and by rather more—6 per cent—in Continental western Europe, where in 1950 French and Belgian production had been held back by lack of demand. In the United Kingdom, the increase in production came partly from the re-introduction of Saturday working and partly from a further moderate improvement in output per manshift; there was also a slight rise in employment.<sup>1</sup>

The increase in production in eastern Europe was almost entirely accounted for by Poland, where output rose by 5 per cent, or 3¼ million tons, in the first eleven months of the year. Over half of this rise appeared to stem from higher productivity, which was announced by the Government to have risen by 40 kilogrammes per man-shift—that is, by approximately 3 per cent.<sup>2</sup> In Czechoslovakia, as already seen in section 1 above, 1951 saw a serious failure in coal supplies which had repercussions

throughout the Czechoslovak economy and, indeed, throughout the whole area. The Ostrava district, where production is known to have declined absolutely, is normally responsible for about 85 per cent of the country's hard coal supplies. Employment appears to have increased by some 3 per cent in the course of the year, but labour turnover, even by the standards of the coal-mining industry, was very high<sup>3</sup> and productivity did not increase: as a result, the Government initiated policies aimed at increasing output analogous to those initiated in the steel industry.<sup>4</sup> As in other European countries, work norms are to be increased, the wage structure changed, and steps are being taken to speed up mechanization.

Thus far, on the supply side, although results vary from country to country, there is a considerable similarity between the problems experienced in eastern and western Europe. As might be expected, however, the similarity ends when the analysis turns to the side of demand. In eastern Europe, the growth of demand was the inevitable result of rapid industrialization and, in particular, rapid increases in output of the steel, chemicals and other coal-intensive industries. In western Europe, on the other hand, where available supplies increased by 13 per cent on the Continent

<sup>1</sup> A more detailed analysis of production problems in the United Kingdom and other western European countries is given in Chapter 6.

<sup>2</sup> It is interesting to note that this increase in productivity in Poland occurred in a year when approximately 26 new coal cutters and 7 new power loaders were delivered to the mines relatively to each 10 million tons of coal produced. In the United Kingdom, where over-all output per manshift on a nine-months basis rose 2 per cent, the corresponding figures were 29 cutters and 0.4 loaders (at an annual rate for the first nine months).

<sup>3</sup> The permanent labour force in the Ostrava mines is known to be slightly lower than in 1947.

<sup>4</sup> See page 59 above.

and 7 per cent in the United Kingdom, the full extent of the increase in demand came as something of a surprise. Obviously, demand for current use would increase substantially over the slack 1950 level, but it seems certain that purchases for stock also played a major role. Buyers, both private and public, no doubt held back in the winter 1949/50 waiting for prices to fall (and partly expecting a further reduction of their future consumption because of a business recession) and then, under the influence of the threat of war and pending price increases, sought to obtain more than their current requirements. Unfortunately, it is impossible to provide a quantitative measure of this movement in stocks, as existing European statistics on the subject are inadequate.<sup>1</sup>

In face of the shortage, a number of countries in western Europe re-introduced allocation machinery which had been allowed to lapse, and others began to curtail stock formation or consumption by making effective previously existing machinery which had generally been kept going on the basis that requirements were generally met to the extent of 100 per cent. Another manifestation of the shortage was an increasing interest in poorer-quality solid fuels such as lignite; the United Kingdom was even able to export slurry, which is not normally regarded as saleable material.<sup>2</sup> In eastern Europe, production of lignite rose by 11 per cent and, in terms of hard coal equivalent, now contributes some 40 per cent of eastern Europe's total supplies of solid fuel.

Western Europe avoided serious consequences from a shortage in its main source of energy by resorting to imports from the United States, which rose rapidly:

	million tons
First quarter 1951 . . . . .	2.9
Second quarter 1951 . . . . .	5.7
Third quarter 1951 . . . . .	7.0
Fourth quarter 1951 . . . . .	9.2

In order to carry this additional traffic, world tramp fleets were augmented by bringing back on to the high seas a large number of "Liberty" ships which had been laid up after the war. Before this, freight rates had already risen so high<sup>3</sup> that the landed cost of

American coal was more than double the f.o.b. price, which in itself is already roughly double the United States pithead price (\$5 per ton, compared with European pithead prices of \$7 to \$14). This expensive American coal has put a heavy burden on the balance of payments of many countries, the more so as the greater part not only of the coal, but also of the freight, has to be paid in dollars. But the imported coal made it possible to satisfy demand to such an extent that only in a few specific cases was production in western Europe hampered by lack of fuel.

The effects of the shortage on western European hard coal prices were radically different in the importing countries from those in the major producing countries which are largely independent of imports. Thus, in Belgium, western Germany and the United Kingdom, prices rose only moderately and in general by no more than the cost of production, but in the importing countries there were violent increases which in the extreme cases of Austria and Sweden exceeded 70 per cent. These price changes are illustrated by the following figures:

#### *Average Wholesale Prices of Hard Coal*

*Percentage increases, October 1950 to October 1951*

Belgium . . . . .	4	France . . . . .	42
United Kingdom . . . . .	9	Netherlands . . . . .	51
Western Germany . . . . .	12	Sweden . . . . .	72
Switzerland . . . . .	21	Austria . . . . .	79
Italy . . . . .	41		

These increases were not, of course, entirely attributable to the high price of American coal; export prices from other countries rose in sympathy. Polish prices were raised as high or higher than the American landed price, the western German export price was raised by 32 per cent in August and the average price of exports from the United Kingdom crept steadily upwards as new agreements were negotiated in the course of the year. Polish prices were so high that some countries refused Polish offers, but over the year as a whole Poland exported about the same amount to western European countries as it had in 1950, although it became increasingly difficult to find counter-deliveries of the same economic value which would not be ruled out as "strategic materials": in December, for this reason, Danish-Polish trade negotiations concerning coal broke down.

To the minor importing countries of western Europe, the need for a sudden switch over to the United States for a major portion of their coal

<sup>1</sup> The most comprehensive series published relates to Great Britain, a country which maintained a coal allocation system throughout the period and thus cannot be very representative.

<sup>2</sup> This material is excluded from all figures in Table 28.

<sup>3</sup> Various figures between \$10 and \$12.50 per ton have been quoted for 1951 compared with around \$4.50 in the middle of 1950.

supplies meant not only soaring prices but a certain degree of industrial dislocation. This recurring problem arises from the fact that significant fluctuations in demand, although much less violent than those which occurred before the war, have continued to occur in post-war western Europe. But, unlike in pre-war times, there are no reserves of miners or mines in the two largest producing countries to take up the slack when demand increases. Table 28 shows how in 1951 this situation was aggravated by the fact that the United Kingdom was not only unable to increase exports but actually reduced them; in the United Kingdom, consumption demands also increased rather more than in the previous year and, in addition, in the winter of 1950/51 consumption had been maintained only at the expense of too great a reduction in stocks.

However, even had United Kingdom exports been maintained, substantial imports from the United States would still have been necessary: the increase in total availabilities in Continental western Europe in 1951 was much greater than the total of United Kingdom exports in 1950.

The difference between the total quantity of coal demanded, at current prices, in western Europe in 1951 and western Europe's own production was a relatively small proportion of total consumption. But this small deficit had disproportionate general effects and the increasing scarcity of solid fuel intensified the importance of coal in bilateral trade negotiations and made the position of countries whose bargaining power was weak, such as Austria, particularly difficult.

## Chapter 3

# INTERNATIONAL TRADE AND PAYMENTS

### 1. THE GENERAL PATTERN OF TRADE

#### *The Deterioration of Europe's Overseas Trade Balance*

The previous progress towards equilibrium in Europe's overseas trade and payments was abruptly halted in 1951.<sup>1</sup> Up to that time, the rapid recovery of production in Europe had made it possible to reduce extraordinary post-war imports both of manufactures and of primary commodities normally produced in Europe, even though imports of many raw materials necessarily rose along with the growth in industrial output. The net result was a slight decline in the total volume of imports from overseas during the period from 1948 to 1950. At the same time, the volume of exports to overseas markets rose and, in 1950, reached a level some 40 per cent higher than in 1948.

This improvement in Europe's balance of trade in terms of volume was, however, accompanied by and—at least to some extent—contingent upon a fall in the prices received for its exports compared with those paid for its imports in trade with overseas areas. The greatest shift in the terms of trade was, of course, in September 1949, when many European countries devalued their currencies, and the adverse movement was strongly accentuated by the increase of primary prices which preceded, and the far greater increase which followed the outbreak of war in Korea. As a result, the reduction of the deficit in Europe's balance of trade with overseas areas, although substantial, was much smaller than the movements in the volume of trade would in themselves have brought about.

While greater difficulties in Europe's trade balance with overseas areas were clearly foreseeable in the latter half of 1950, they did not seriously affect the actual payments position in that year. The volume of imports remained relatively low, partly because of

favourable harvests and partly because there was some drawing down of stocks, while the higher quotations for most raw materials were translated into higher prices paid for actual imports only after a lag of several months. Furthermore, an exceptional expansion of European exports occurred towards the end of the year, largely in the form of increased purchases by the United States. Thus, despite the deterioration in its terms of trade, Europe's trade deficit with overseas countries fell from \$4.1 billion in 1949 to \$2.7 billion in 1950.

This favourable constellation of forces could not be expected to last. In 1951, Europe had to carry the double burden of a substantial increase in the volume of imports from overseas and higher raw material prices. Although the volume of overseas exports again expanded substantially and export prices also rose, the gain in export receipts was far from sufficient to prevent the re-emergence of a big deficit in overseas trade.

The magnitude of these movements may be gauged from the estimates given in Table 29. The impact of the adverse movements of Europe's terms of trade since 1949 is indicated by the fact that the "volume" of Europe's overseas deficit (if imports and exports are valued at the prices prevailing before the devaluations) fell from little less than \$6 billion in 1948 to a bare \$1 billion in 1951, while the actual "value" of the deficit almost doubled from 1950 to 1951 and amounted to only one-quarter less than in 1948. It must, however, be borne in mind that the economic burden represented by the deficit remains considerably smaller than in 1948, both because its real value has decreased with the general rise in prices and because the level of European production has risen considerably. If measured as a percentage of European exports to overseas markets, the trade deficit is seen to have decreased from 65 per cent in 1948 to 28 per cent in 1950, rising again to about 35 per cent in 1951.

<sup>1</sup> As indicated in the tables, the analysis of Europe's overseas trade and payments position is necessarily limited to those countries for which trade statistics are available; that is, primarily western Europe.



**Table 29**  
**EXPORTS, IMPORTS AND TRADE BALANCES OF WESTERN EUROPEAN COUNTRIES <sup>a</sup>**

*Millions of dollars, f.o.b.*

Year	IN CONSTANT JANUARY-SEPTEMBER 1949 PRICES				IN CURRENT PRICES			
	Trade with overseas <sup>b</sup> countries			Trade with western Europe	Trade with overseas <sup>b</sup> countries			Trade with western Europe
	Imports	Exports	Balance	Imports=Exports	Imports	Exports	Balance	Imports=Exports
1948 . . . .	15,000	9,200	-5,800	8,700	15,000	9,100	-5,900	8,600
1949 . . . .	14,700	10,600	-4,100	10,000	14,000	9,900	-4,100	9,400
1950 . . . .	14,200	13,000	-1,200	12,800	12,500	9,800	-2,700	10,400
1951 <sup>c</sup> . . .	16,200	15,200	-1,000	14,300	17,800	13,300	-4,500	13,800

*Sources:* See "Notes to the Statistics".

<sup>a</sup> For countries included, see Table 1.

<sup>b</sup> Including trade with eastern Europe.

<sup>c</sup> January-September 1951 at annual rates.

Alongside the data on Europe's trade with overseas countries, Table 29 also shows the rapid expansion which has occurred in trade among western European countries.<sup>1</sup> In terms of volume, the increase over the period from 1948 to 1951 has been about two-thirds, or roughly the same as in exports to overseas destinations, although the rise in intra-trade was relatively greater in 1950 and relatively smaller in 1951. Expressed in current dollars, as in the last column of the table, the increase has been less than that in volume but this is purely the expression of the changes in exchange rates resulting from devaluation. For the intra-trade of the group as a whole, the rise in exports represented a corresponding rise in imports, but this would not, of course, be true of individual countries in the group.

#### *The Position of Individual Countries*

Under the rapidly changing circumstances of the past two years, the experience of individual European countries has differed in varying degrees—in some instances more favourable and in others less so—from the composite results which have been given in Table 29. These differences may be seen in Table 30, showing the relative changes from 1949 to 1950 and from 1950 to 1951 in the total volume and value and unit value of the imports and exports of particular countries, including their trade with one another. The relative movements shown are, in each case, from the first nine months of one year to the first nine months of the next, so that the periods covered

<sup>1</sup> The very different trends in trade between western European countries on the one hand and eastern European countries on the other is discussed separately in section 3 of this chapter.

correspond, roughly, to the situations prevailing before the currency devaluations of 1949 and before and after the Korean events had shown their varying effects on the volume and value of international trade.

The development of exports in terms of volume from 1949 to 1950 shows, very broadly, the effects of devaluation: while exports rose typically by about one-third for countries which had devalued by 20 per cent or more, the increase was considerably less for Switzerland and Italy, and Belgium's exports failed to increase. The United Kingdom, however, experienced difficulties in making full use of the sales possibilities opened up by devaluation, and its exports rose less conspicuously than those of other devaluing countries.

The changes from 1950 to 1951 show a somewhat different picture. Again, the volume of exports has risen sharply in many cases, but this time the pattern of change appears to have been governed by differences in conditions determining the supply of goods for export rather than by relative competitive advantages. The United Kingdom, Sweden and Norway showed the smallest increase. These are economies where full employment has prevailed for some years and where the increase in industrial production from 1950 to 1951 was small, while internal demand remained strong.

With the exception of Italy,<sup>2</sup> all the other countries shown in the table increased their exports in

<sup>2</sup> The failure of the total volume of Italian exports to rise more is due mainly to the fact that exports of foodstuffs were smaller in 1951 than in 1950. Exports of industrial products, however, rose by some 20 per cent, or rather more than the increase in Italian industrial production (comparisons based on first nine months of each year).

larger proportion than the increase in their production. These countries were in a position to take advantage of the export boom because they possessed unused production reserves and were free from heavy pressure on the home market. Exports from western Germany

increased strikingly by more than 60 per cent on top of the even faster growth of the preceding year, while exports from France, Switzerland, and Belgium rose by 30 per cent or more in each case. The Netherlands and Denmark, although fully employed economies

**Table 30**  
**VOLUME, UNIT VALUE, VALUE AND BALANCE OF FOREIGN TRADE OF EUROPEAN COUNTRIES**  
*First 9 months of each year*

Country	Year (First 9 months)	Index numbers—corresponding period of previous year = 100								Actual trade balance <sup>c</sup> f.o.b. (Millions of dollars) quarterly average	Percentage of imports, f.o.b., covered by exports
		Volume			Unit value (in terms of U.S. dollars)			Current value (in terms of U.S. dollars)			
		Imports	Exports	Volume balance <sup>a</sup>	Imports	Exports	Terms of trade <sup>b</sup>	Imports	Exports		
United Kingdom .	1950	102	115	89	77	72	107	79	83	—102.5	93
	1951	114	106	108	133	115	116	153	121	—627.4	74
Netherlands . . .	1950	132	138	96	77	72	107	102	98	—138.5	70
	1951	109	123	88	124	116	106	134	144	—151.1	75
Denmark . . . . .	1950	123	131	94	78	70	112	97	92	— 39.7	80
	1951	98	120	82	125	107	117	123	128	— 41.1	83
France . . . . .	1950	103	127	81	84	78	108	87	99	+ 19.9	103
	1951	115	132	87	131	114	114	151	151	+ 33.7	103
Western Germany .	1950	130	208	63	89	75	118	111	155	—115.3	79
	1951	111	162	69	130	119	110	145	194	+ 52.0	107
Italy . . . . .	1950	102	120	85	83	84	99	84	100	— 45.0	86
	1951	113	114	99	132	117	113	149	141	— 85.5	82
Switzerland . . . .	1950	119	107	112	86	99	91	108	106	— 10.8	95
	1951	130	131	99	123	109	116	148	129	— 54.3	83
Belgium- Luxembourg . .	1950	108	97	111	86	76	113	98	80	— 33.6	92
	1951	114	131	87	127	135	94	141	174	+ 76.3	113
Sweden . . . . .	1950	124	130	95	77	71	108	95	92	— 0.2	100
	1951	127	103	123	127	157	81	162	161	— 0.8	100
Norway . . . . .	1950	105	131	80	78	69	114	83	89	— 62.4	60
	1951	113	112	102	119	132	90	125	156	— 49.8	75
Finland . . . . .	1950	112	132	85	77	65	118	87	86	—	100
	1951	119	119	99	142	179	79	169	214	+ 38.2	127
Turkey . . . . .	1950	120	98	122	80	100	80	98	99	— 11.8	81
	1951	115	103	111	118	129	92	137	148	— 17.4	80

NOTE. — The above unit value indices were constructed with moving current weights, except for Italy, Sweden and Switzerland. See "Notes to the Statistics".

<sup>a</sup> Ratio of import volume index to export volume index.

<sup>b</sup> Ratio of import unit value index to export unit value index.

<sup>c</sup> Import surplus (-), export surplus (+).

hitherto, also belong to this group. It was mentioned in the preceding chapter that these two countries have recently adopted deflationary policies, with the result that their industrial production ceased to expand or even declined. Since, in these countries—as contrasted with the United Kingdom, Sweden and Norway—the failure to expand production came from the demand side, there was no difficulty in making goods available for foreign markets: Danish exports rose by about 20 per cent and Dutch exports even more.

The generally strong upward trend in European exports from 1950 to 1951 is somewhat less reassuring if, instead of comparing the results for the full nine months of each of the two years, the most recent quarterly movements are considered. In Table 31

**Table 31**

**CHANGES IN THE VOLUME OF EXPORTS FROM FIRST HALF TO THIRD QUARTER OF 1949, 1950 AND 1951**

*Average of first and second quarters of corresponding year = 100*

Country	1949	1950	1951
United Kingdom . . . . .	95	103	99
France . . . . .	89	102	88
Netherlands . . . . .	114	127	104
Belgium . . . . .	95	83	92
Switzerland . . . . .	107	120	101
Italy . . . . .	110	115	98
Denmark . . . . .	100	118	94
Sweden . . . . .	117	108	101
Norway . . . . .	82	103	105
Finland . . . . .	162	139	149
Western Germany . . . . .	116	134	111
Austria . . . . .	90	113	98
Total of countries listed <sup>a</sup> { incl. } United Kingdom {	102	107	100
{ excl. }	107	109	100

*Sources:* The figures have been derived from the same sources as those in Table XXI in Appendix A.

<sup>a</sup> Indices by countries are weighted according to values of exports of the base period.

below, the volume of exports in the third quarter of each of the years 1949, 1950 and 1951 is shown as a percentage of the average for the first two quarters of the same year.

It could, of course, not be expected that the increase in the third quarter of 1951 would be as great as in

1950, when the effects of speculative buying were evident in the export figures as early as the quarter immediately following the start of the Korean war. It can be seen, however, that, in all countries for which data are available—with the exception of the United Kingdom, Norway and Austria—the increase was smaller (or the decrease greater) in the third quarter of 1951 than it was in 1949. Even the relative strength of British exports in the third quarter of 1951 is more apparent than real, since exports from the United Kingdom had been particularly weak in the third quarter of 1949 when rumours of the impending devaluation of the pound were rife. The trends shown in the table thus suggest that the expansion of European exports was coming to a halt in the latter part of 1951. Provisional data for the last months of the year show that the increase in exports from the third to the fourth quarter was considerably smaller than would normally be expected from purely seasonal factors.

The volume of imports of most European countries had also increased in 1950 over the preceding year, although in most instances substantially less than the volume of exports. Table 30 shows that the rise was much greater than the average in five countries—Sweden, Switzerland, western Germany, the Netherlands and Denmark. Of these, the first two were, and still are, in a favourable balance-of-payments position and could afford to continue an unabated increase in their imports in the following year. In Switzerland, however, there was a marked fall in imports in the third quarter of 1951<sup>1</sup> not unlike that in the United States, where, as seen in Chapter 1, they were largely influenced by movements in business inventories and by official stockpiling policies. The three other countries mentioned ran into serious balance-of-payments difficulties and had to reduce drastically the rate of increase of their imports from 1950 to 1951. In Denmark, the volume of imports failed even to increase at all. In that country—and in the Netherlands—the biggest fall in imports came in the third quarter of 1951, when their deflationary policies were beginning to bear fruit, while western Germany imposed a drastic limitation on imports earlier in the year in order to rectify its position within the European Payments Union.

In other countries—among them the United Kingdom, France and Italy—imports had remained at a comparatively low level in 1950: at least in the case

<sup>1</sup> See Appendix Table XXI.

of the United Kingdom, this was partly due to a reluctance to buy at the very high prices of the latter half of 1950 and involved a drawing down of stocks. Imports could not be held down to this low level in the face of increasing production and inflationary pressures, and the volume of imports of the United Kingdom as well as that of France and Italy increased by about 15 per cent from 1950 to 1951. The increase was not only in raw materials, but also in consumer goods, imports of which were increased in France and Italy in order to combat the rise in domestic prices. In the United Kingdom the pressure to import increased progressively during the year until the import volume reached, in the third quarter, a level 25 per cent higher than a year before.

The net result of these divergent movements in the volume of imports and exports has been that, in the majority of countries, the "volume balance" has improved in the sense that the volume of exports rose considerably more than that of imports. This was indeed a necessary adjustment—if serious balance-of-payments difficulties were to be avoided—in those countries, which were the majority, whose terms of trade moved against them. In the United Kingdom, the difficulty of increasing exports, the necessity for a big rise in imports and a serious deterioration of the terms of trade conspired to create a new balance-of-payments crisis. Likewise, the balance of trade of Italy and Switzerland deteriorated, owing to relatively low exports and high imports respectively, although these two countries, particularly Switzerland, were in a relatively stronger position than most to meet the strain.<sup>1</sup>

Those countries whose terms of trade have recently taken a favourable turn fared, of course, much better. These were five: Belgium, Sweden, Norway, Finland and Turkey, all of them countries whose exports consist largely of industrial materials, primarily steel in the first case, forestry products in the three northern countries and cotton in Turkey. In Norway and Finland, the volume of imports and exports increased *pari passu*, and the gains from better terms of trade were reaped in the form of an improvement in the trade balance. Belgium's trade balance improved sharply—with extremely disturbing consequences for

its trading partners—as the combined effect of favourable price relations, a large rise in export volume, and a relatively modest increase in its demand for imports, while Sweden's terms of trade improved so much that it was able to cover an import volume increased by one-quarter with an almost unchanged export volume and still preserve a complete balance on trade account.

#### *Comparative Movement of Exports to Overseas and to Europe*

The increase in the total volume of exports of European countries from the first nine months of 1950 to the corresponding period of 1951 was very nearly the same—20 per cent—as the increase from 1949 to 1950. Within this average, however, overseas exports and intra-European trade behaved in rather different ways in the two years. In 1950, one of the outstanding new factors was the extensive liberalization of trade among western European countries: consequently, the expansion from 1949 to 1950 was considerably greater in intra-European trade than in overseas exports. To some extent, the sudden expansion of exports to European countries may have been achieved at the expense of keeping overseas exports lower than they might otherwise have been. There is some reason to think that this may have been true of textiles, for instance. In 1951, the picture changed: previous measures to liberalize imports could not, of course, be expected to continue to raise intra-European trade in relation to overseas exports once the higher level of trade was reached, and no further significant progress was made in 1951 in liberalization. A retreat even had to be called in one important case when western Germany temporarily returned to full-scale import control in the spring of the year.<sup>2</sup> On the other hand, the increase in demand following the outbreak of war in Korea affected overseas exports at least as much as trade between European countries.

The result was that, from 1950 to 1951, most western European countries expanded their overseas exports considerably more than their exports to European destinations. This was true not only of countries

<sup>1</sup> In France, the over-all trade balance improved, but largely owing to an export surplus to overseas countries within the French currency area, and difficulties arose in the French dollar position as described in a later section of this chapter.

<sup>2</sup> As a result of tightening of import controls, western Germany's imports from European countries fell by 40 per cent from the first to the second quarter of 1951; in the following quarter they rose again to approximately the level of the first quarter.



Table 32

EXPORTS OF EIGHTEEN WESTERN EUROPEAN COUNTRIES<sup>a</sup> TO EUROPEAN  
AND OVERSEAS COUNTRIES

Annual rates for first 9 months of each year

Exporting country	EXPORTS TO WESTERN EUROPE			EXPORTS TO OVERSEAS COUNTRIES <sup>b</sup>		
	Index numbers of volume		Current value in 1951 (Millions of dollars)	Index numbers of volume		Current value in 1951 (Millions of dollars)
	1950 (1949=100)	1951 (1950=100)		1950 (1949=100)	1951 (1950=100)	
United Kingdom . . . . .	130	99	2,063	108	108	4,972
Western Germany . . . . .	190	141	2,156	302	205	1,197
Sixteen other western European countries . . . . .	115	122	9,594	121	128	7,082
Total . . . . .	125	120	13,813	118	123	13,251

Sources: See "Notes to the Statistics".  
<sup>a</sup> For countries included, see Table 1.

<sup>b</sup> Including trade with Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, the U.S.S.R. and Yugoslavia.

whose total exports rose sharply, but also of the United Kingdom, whose exports to non-European destinations rose by 8 per cent in volume while its exports to Continental Europe remained practically unchanged. Nevertheless, the increase in overseas exports from western European countries taken as a whole was only 3 percentage points greater than that in intra-European trade, as can be seen in Table 32. This result serves to illustrate the heavy weight of the United Kingdom in Europe's overseas trade: since the United Kingdom accounts for almost 40 per cent of western Europe's overseas exports (as against only 15 per cent of intra-European trade) the small over-all increase of British exports lowers the European index of overseas exports much more than that of intra-European trade.

*Expansion of Western Germany's Exports*

Table 32 also shows the continued upsurge of western Germany's export trade. Over the two years from 1949 to 1951, German exports to other western European countries increased by almost 170 per cent to a level which, measured in current value, is slightly higher than that of the United Kingdom. In the same period, overseas exports from western Germany, which had previously lagged behind most, rose to a level more than six times as high as that of 1949. Even so, western Germany accounted in 1951 for less than 10 per cent of overseas exports from western Europe

compared with about 17 per cent for the whole of Germany in 1938 and, in the generally expansive climate of the last few years, the reappearance of western Germany as a seller on the world market has not created serious problems so far for other European exporters. Germany's exports have expanded most in the fields where Europe's overseas exports tend to be limited by available supply. In the particular field of textiles, where the prospective export position of Europe appears to be precarious, western Germany's exports to overseas remain extremely low, in comparison both with the present level of textile exports from other European countries and with German exports before the war. As noted in Chapter I, the low share of textiles and the high share of metals and engineering goods in its exports, together with the apparently small volume, at least so far, of its own armaments demands, provide western Germany with an extremely favourable structure for the further development of its exports compared with other leading western European countries.<sup>1</sup> The expansion of western Germany's exports is thus likely to continue, although at a considerably slower rate.

<sup>1</sup> In the first nine months of 1951, exports of metals and engineering products accounted for 63 per cent of western Germany's total exports overseas; for the United Kingdom, the corresponding figure was 47 per cent, for France 40 per cent, and for Italy 24 per cent. The share of textiles in overseas exports, on the other hand, was 6 per cent for western Germany, 22 per cent for the United Kingdom, 20 per cent for France, and 44 per cent for Italy.



In 1948 and 1949, the recovery of western German exports had fallen far behind the recovery of industrial production, owing to an extraordinarily strong internal demand and to the necessity for a period of re-stocking and re-tooling before exports could really get under way. In 1950 and 1951, however, exports increased much faster than industrial production, as shown below :

*Indices of volume (1936 = 100)*

	<i>Industrial production</i>	<i>Total exports</i>
1948 . . . . .	60	22
1949 . . . . .	88	42
1950 . . . . .	113	95
1951 <sup>a</sup> . . . . .	134	138

<sup>a</sup> First eleven months.

It appears that, in comparison with 1936, exports have reached a level slightly higher than that of industrial production. The ratio of exports to industrial production in western Germany has thus not risen so much as in the United Kingdom, where, in 1951, exports were 184 per cent and industrial production 156 per cent of the 1938 volume.<sup>1</sup> The German ratio would be unlikely to rise and would probably fall if rearmament in that country assumed large proportions; by and large, it seems that exports in the near future will have to follow rather closely the rise in production.

*Imports of Basic Commodities*

Differences in the recent development of imports by individual countries are to be explained largely by different policies of stocking adopted by Governments and by private business in the face of higher demand and rising prices. It appears from Table 33 that the total volume of imports of raw materials and fuels into Switzerland, Denmark and the Netherlands increased conspicuously in the half-year immediately following the outbreak of the Korean war. The high level of raw material imports by Switzerland and the Netherlands was maintained in the first half of 1951, and only in the third quarter of the year did the

<sup>1</sup> The data for the United Kingdom are based on the first eleven months of the year. If the figures for western Germany are shifted to a 1938 base (as for the United Kingdom), the relative increase in exports compared with industrial production appears substantially greater (about 37 per cent and 13 per cent respectively), but this difference in the results reflects the fact that, under national socialism, the increase in industrial production from 1936 to 1938 had gone largely into military preparation and other domestic uses and little of it into exports.

**Table 33**

**VOLUME OF TOTAL IMPORTS OF SELECTED INDUSTRIAL RAW MATERIALS AND FUEL BY ELEVEN WESTERN EUROPEAN COUNTRIES**

*Index numbers — 1949 = 100*

Importing country	1950		1951
	First half	Second half	First half
France . . . . .	97	82	95
Netherlands . . . . .	120	127	130
Belgium-Luxembourg . . . . .	123	121	123
Switzerland . . . . .	96	164	164
Italy . . . . .	119	117	130
Denmark . . . . .	114	154	104
Sweden . . . . .	95	113	118
Norway . . . . .	92	109	114
Western Germany . . . . .	138	156	141
Austria . . . . .	114	94	101
Total of countries listed	112	117	119
United Kingdom . . . . .	101	95	105

*Source :* United Nations Department of Economic Affairs.

*NOTE.* — The figures indicate the volume of imports from all sources of the following commodities: coal and coke, mineral oils, steel, copper, tin concentrates, tin metal, timber, wood-pulp, hides and skins, rubber, raw wool, wool yarns, raw cotton and cotton and artificial yarns. The volume of imports of these commodities has been calculated by applying typical 1948 prices to the quantities actually traded.

volume of imports decline, as already mentioned. In western Germany, imports of raw materials rose rapidly during 1950 and remained at a relatively high, though declining, level in the first half of 1951; the down-turn was mainly in textile fibres and yarns and other materials for light industry, reflecting the recession in consumer goods production discussed in the preceding chapter. In other countries, among them the United Kingdom and France, raw material imports remained rather low in the second half of 1950, and, as mentioned above in the case of the United Kingdom, this was made possible only by a reduction of stocks. The withdrawals from stocks in the United Kingdom in 1950 and the necessity for a subsequent re-stocking in 1951 has been, as discussed later, an important element in the recent up-and-down movement in the British balance-of-payments position.

Table 34 shows, for a number of important commodities, the net imports of western European countries from outside the area.<sup>2</sup> The deficit in coal

<sup>2</sup> Difficulties inherent in the consolidation of trade statistics for a large number of countries, recorded in a variety of ways, render the data in the table unreliable, except as indications of rough orders of magnitude.

Table 34

VOLUME OF NET IMPORTS BY WESTERN EUROPE OF SELECTED RAW MATERIALS,  
FUEL AND FOODSTUFFS

First 9 months of each year at annual rates  
Millions of dollars at typical 1951 prices, c.i.f.

Commodity	UNITED KINGDOM			OTHER WESTERN EUROPEAN COUNTRIES <sup>a</sup>		
	1949	1950	1951	1949	1950	1951
Coal and coke <sup>b</sup> . . . . .	—	—	33	246	8	474
Mineral oil, crude and refined . . . .	563	564	726	899	1,081	1,344
Copper . . . . .	110	108	133	108	104	127
Sawn softwood <sup>c</sup> . . . . .	97	100	155	<sup>d</sup>	<sup>d</sup>	<sup>d</sup>
Wood-pulp <sup>e</sup> . . . . .	38	23	50	<sup>d</sup>	<sup>d</sup>	<sup>d</sup>
Wool, raw . . . . .	780	630	508	1,405	1,365	1,002
Cotton, raw . . . . .	818	756	734	1,506	1,709	1,509
Rubber . . . . .	152	233	294	410	394	492
Bread grain . . . . .	517	329	442	860	603	804
Coarse grain . . . . .	112	194	227	549	470	464
Sugar <sup>f</sup> . . . . .	215	192	245	..	..	..
Meat <sup>f</sup> . . . . .	314	361	228	..	..	..
Oilseeds <sup>g</sup> . . . . .	228	223	189	379	315	512
Animal and vegetable oils and fats <sup>h</sup> .	251	279	192	203	340	342
Coffee . . . . .	32	29	39	343	375	387
Tea . . . . .	179	140	182	26	29	28
Tobacco, raw <sup>i</sup> . . . . .	186	184	189	371	370	403

Sources: The figures are derived mainly from Tables XXVIII and XXIX in Appendix A. For details, see "Notes to the Statistics".

NOTE. — Unless otherwise stated below, the figures indicate the difference between total imports from all sources and total exports to all destinations of the United Kingdom and of other western European countries taken as a whole. With the exception of coal and coke, sawn softwood, wood-pulp, sugar and meat, trade in the commodities listed between the United Kingdom and Continental Europe is on a small scale, and the figures can therefore be regarded as roughly indicating the volume (at constant 1951 prices) of net imports from overseas and from eastern Europe (including the U.S.S.R.). For the commodities mentioned in the preceding sentence, the figures refer to imports from outside western Europe as specified in footnotes <sup>b</sup>, <sup>c</sup>, <sup>e</sup> and <sup>f</sup>.

<sup>a</sup> For countries included, see Table 1.

<sup>b</sup> Imports from the United States only.

<sup>c</sup> United Kingdom imports from Canada, the United States, Brazil and eastern Europe (including Yugoslavia and the U.S.S.R.).

<sup>d</sup> Data not computed because net imports from outside the area are relatively unimportant.

<sup>e</sup> United Kingdom imports from Canada, the United States and the U.S.S.R.

<sup>f</sup> United Kingdom imports from overseas countries.

<sup>g</sup> The figures are not directly comparable with those shown in Table XXVIII.

<sup>h</sup> Excluding butter.

<sup>i</sup> Total imports, without deduction of exports.

production continues to weigh heavily in Europe's import bill. Imports of American coal, which in 1950 had shrunk to insignificant amounts, had to be resumed in 1951 on an even bigger scale than in 1949, at a total cost of about \$500 million (c.i.f.). Imports of mineral oil continue the rapidly increasing trend of recent years, and the Iranian oil dispute does not appear, so far, to have limited supplies to Europe.

In spite of the developing world shortage, increased amounts of copper found their way to Europe in 1951. By contrast, steel tended to be drawn away, especially through abnormally large shipments to North America (as shown in Chapter 2) despite the unsatisfied demands in Europe.

Imports of cotton and, still more, of wool fell drastically in 1951. In the case of cotton, European countries had been anxious in 1950 to secure supplies from non-dollar sources after cotton exports from the United States had been curtailed. The heavy fall in wool imports reflects a reluctance to buy at the very high prices quoted up to the spring of 1951: imports into western European countries as a whole in the first nine months of 1951 were 25 per cent smaller than in the corresponding period of 1950. It cannot be taken for granted that this fall will automatically be followed by an upturn, in view of the drastic decline in wool consumption which became evident late in 1951.

The remarkably low level of western European grain imports in the calendar year 1950 appears to have

been only a passing phenomenon due to an abnormal seasonal distribution of imports rather than to smaller import requirements. While imports of grain in the calendar year 1950 were about 5 million tons smaller than in the preceding year, there was only a small difference between the two harvest years 1949/50 and 1950/51, as shown below :

*Gross Imports of Grain by Western European Countries*

(Millions of tons)			
	Half-yearly totals	Calendar-year totals	Harvest-year totals
1949 January-June	12.1	24.1	22.5
July-December	12.0		
1950 January-June	10.5	19.4	20.6
July-December	8.9		
1951 January-June	11.7	23.5	
July-December	11.8		

NOTE. — The figures are derived from the basic materials for Table XXVIII in Appendix A. The figure for the second half-year 1951 is an estimate based on imports in the third quarter.

The explanation of the extraordinarily low imports in the second half of 1950 seems to lie, once more, in stock changes in the main importing countries,

especially the United Kingdom and western Germany<sup>1</sup> and, for reasons stated in Chapter 2, imports in the near future are likely to be greater rather than less than in 1951, particularly from dollar sources.

Since some re-stocking of raw materials has taken place in several European countries in 1951, the volume of overseas imports of basic materials in 1952 will not necessarily have to be appreciably greater than in 1951, except for grain and also coal. The prospective increase in import requirements for these two products taken together, however, may well raise the total cost of overseas imports by as much as \$600 to 700 million (c.i.f.). While this is only some 4 per cent of western Europe's total imports from outside the area, it would represent a serious additional strain on dollar resources. This prospective increase in the cost of coal and grain imports and the additional burden on the balance of payments would, at best, be only partly offset by a reduction in the average cost of total imports, even if raw material prices remain at the level to which they had fallen by the end of 1951.

<sup>1</sup> See SURVEY for 1950, pages 96 and 99.

## 2. NEW STRAINS IN INTERNATIONAL PAYMENTS

Despite the great increase in 1951 in Europe's overseas trade deficit, the balance-of-payments position of a number of countries appeared to strengthen during the year, as reflected, for instance, in their gold and dollar holdings (see Table 35) and, in most countries, the problem seemed to become less one of a shortage of dollars in particular than one of general balance-of-payments disequilibrium. With the prominent exception of the United Kingdom, whose dollar fortunes were abruptly reversed in the middle of the year, most other dollar-short countries in Europe had settled on a *modus vivendi* in which their deficits were manageable with the available United States aid. This help, though decreasing, still amounted to more than \$2 billion in 1951 with respect to western Continental European countries, whereas economic aid to the United Kingdom, which was running at an annual rate of some \$800 million before Korea, had been suspended shortly thereafter by agreement between the two Governments, as British gold and dollar receipts were temporarily swollen by the raw materials boom. By the critical third quarter of 1951, receipts of extra-

ordinary aid by the United Kingdom had become negligible, as ECA-financed goods in the "pipe-line" played out.

Differences in the payments position of individual countries were, of course, largely due to such factors as the varying behaviour of the volume and prices of their exports and imports, the unequal burden of rearmament programmes, and differences in internal inflationary pressures and monetary policies. In France, for example, the foreign exchange problems which emerged in the latter part of the year seem, as discussed below, to have been largely the outgrowth of the severe domestic inflation which set in again after Korea. To a great extent, however, the relatively favourable position of many countries in western Continental Europe was simply the counterpart of the difficulties which developed in the United Kingdom.

Thus, in the first half of 1951, the greater part of western Europe's heavy deficit with the overseas sterling area was settled by drawings against the

Table 35

GOLD AND DOLLAR HOLDINGS OF EUROPEAN COUNTRIES

Millions of dollars

Country	Change during			Holdings at the end of September 1951
	1950	1951		
		First half	Third quarter	
Switzerland <sup>a</sup> . . . . .	— 25	— 38	— 4	1,892
France <sup>b</sup> . . . . .	+ 89	+ 9	— 23	770
Belgium-Luxembourg . . . . .	—104	— 17	+ 61	769
Italy . . . . .	+ 11	— 39	+ 11	543
Western Germany . . . . .	+ 73	+135	+146	503
Netherlands . . . . .	+140	— 59	—	446
Portugal . . . . .	+ 22	+ 25	+ 19	282
Sweden . . . . .	+ 45	+ 23	— 11	217
Norway . . . . .	— 26	+ 17	+ 42	153
Other Continental Europe <sup>c</sup> . . . . .	— 7	+ 8	+ 12	502
Total . . . . .	+218	+ 64	+253	6,077
United Kingdom <sup>d</sup> . . . . .	+1,612	+567	—598	3,269
Total Europe . . . . .	+1,830	+631	—345	9,346

Sources: *International Financial Statistics*, International Monetary Fund, November 1951.

NOTE. — The figures refer to official holdings of gold, and official and private holdings of short-term dollar assets in United States banks. Separate holdings by dependent overseas territories of European countries are excluded.

<sup>a</sup> Excluding holdings of the Bank for International Settlements.

<sup>b</sup> Since the gold and dollar holdings of the Stabilization Fund and the Caisse centrale are not known, figures given here (which cover the gold

holdings of the Bank of France and French dollar balances in the United States as reported by United States banks) do not necessarily correspond to the actual changes in the French gold and dollar reserves. For further details, see page 86.

<sup>c</sup> Austria, Denmark, Finland, Greece, Iceland, Ireland, Spain, Turkey and Yugoslavia. Data for other European countries are not available.

<sup>d</sup> Official holdings of gold and United States and Canadian dollars.

British quota in the European Payments Union<sup>1</sup> under the partial convertibility linking western Europe and the sterling area through the working of that mechanism. These settlements, together with the United Kingdom's own substantial deficit with overseas sterling countries during the first half of the year were, of course, reflected in their sterling balances in London. It was, in fact, the extraordinary growth in the London balances of overseas sterling countries by the equivalent of \$1,030 million during the first six months of 1951 (following a rise of \$1,060 million during the whole of 1950) which provided one of the main means of financing Europe's increased overseas deficit. In the absence of the facilities provided by E.P.U., at least some Continental European countries would presumably have had to make gold or dollar transfers to the United Kingdom, although others

would have been able to transfer sterling to overseas sterling countries out of their previously acquired balances in London.

The interdependence between the favourable and unfavourable balance-of-payments positions of different countries was also evident after the middle of the year, when, following the collapse of the raw materials boom and the consequent changes in trade balances discussed in Chapter 1, and the further rise in the United Kingdom's own deficit with the Continent, the United Kingdom began making heavy gold payments to the E.P.U. at the same time as other western European countries were drawing gold from the Union.<sup>2</sup> It follows that, if effective curative measures are applied in the United Kingdom, the result will be to generalize payments problems to some extent, and the current focussing of the dollar shortage primarily on the United Kingdom will be seen as a temporary phase.

<sup>1</sup> The deficit of Continental E.P.U. countries with the overseas sterling area amounted to \$322 million in the first half of 1951, as against a deficit of \$450 million for the whole of 1950 (*United Kingdom Balance of Payments 1948 to 1951*, Cmd. 8379, H.M.S.O. London, Table 11). In the first half of 1951, over one-third of this deficit was, however, offset by the surplus which western Continental Europe was running with the United Kingdom.

<sup>2</sup> During the third quarter of 1951, the United Kingdom paid \$106 million in gold in settlement of the sterling area's E.P.U. deficit; in the same period, the other E.P.U. countries' net receipts from the Union were \$117 million. The difference represents the drawing down of the Union's own liquid reserves.



**Table 36. — BALANCE OF PAYMENTS OF EUROPE AND OTHER AREAS WITH THE UNITED STATES**  
*Half-yearly rates—millions of current dollars*

Item	Period	EUROPEAN CURRENCY AREA			Canada	Latin American republics	All other areas <sup>b</sup>	TOTAL WORLD
		United Kingdom	Other European countries	Affiliated overseas countries <sup>a</sup>				
1. Imports from the United States <sup>c</sup>	1950—First half . . . . .	-232	-1,441	- 508	- 918	-1,236	-648	-4,983
	Second half . . . . .	-285	-1,180	- 448	-1,092	-1,481	-673	-5,159
	1951—First half . . . . .	-353	-1,666	- 640	-1,408	-1,806	-869	-6,742
2. Exports to the United States	Third quarter <sup>d</sup> . . . . .	-492	-1,442	- 816	-1,266	-1,944	-860	-6,820
	1950—First half . . . . .	+135	+ 476	+ 686	+ 881	+1,356	+433	+3,967
	Second half . . . . .	+213	+ 681	+1,070	+1,734	+1,734	+793	+5,348
3. Services (net)	1951—First half . . . . .	+246	+ 946	+1,192	+1,123	+1,986	+857	+6,350
	Third quarter <sup>d</sup> . . . . .	+242	+ 786	+ 972	+1,116	+1,466	+680	+5,262
	1950—First half . . . . .	+108	+ 81	- 73	- 168	- 254	-151	- 457
4. Balance on goods and services	Second half . . . . .	+ 94	+111	-121	- 66	- 476	- 39	- 497
	1951—First half . . . . .	+ 60	- 47	- 97	-173	-333	- 60	- 650
	Third quarter <sup>d</sup> . . . . .	+ 84	- 36	-134	- 48	- 436	- 42	- 612
5. Private donations and movements of United States private capital (net)	1950—First half . . . . .	+11	- 884	+105	-205	-134	-366	-1,473
	Second half . . . . .	+ 22	-388	+288	- 88	-223	+ 81	-308
	1951—First half . . . . .	-47	-767	+ 455	-458	-153	- 72	-1,042
6. Balance on goods, services, private donations and United States private capital movements (4+5)	Third quarter <sup>d</sup> . . . . .	-166	- 692	+ 22	-198	- 914	-222	-2,170
	1950—First half . . . . .	+ 47	+136	+ 64	+165	- 20	+ 79	+ 471
	Second half . . . . .	+116	+298	+ 52	+536	+204	+121	+1,327
7. United States Government grants and credits (excluding military aid) <sup>c</sup>	1951—First half . . . . .	+ 24	+104	+ 36	+255	+155	+215	+ 789
	Third quarter <sup>d</sup> . . . . .	- 84	- 4	+ 30	+ 20	+ 60	+170	+ 192
	1950—First half . . . . .	+ 58	- 748	+169	- 40	-154	-287	-1,002
8. Movements of gold and foreign capital (long- and short-term) <sup>e</sup>	Second half . . . . .	+138	- 90	+340	+448	- 19	+202	+1,019
	1951—First half . . . . .	-23	- 663	+491	-203	+ 2	+143	- 253
	Third quarter <sup>d</sup> . . . . .	-250	- 696	+ 52	-178	- 854	- 52	-1,978
9. Net inter-regional transfer of dollars; errors and omissions	1950—First half . . . . .	+418	+1,346	+ 5	+ 4	+15	+407	+2,195
	Second half . . . . .	+225	+956	+ 1	+ 5	+10	+376	+1,573
	1951—First half . . . . .	+115	+1,115	+13	+ 3	+97	+350	+1,693
10. Net inter-regional transfer of dollars; errors and omissions	Third quarter <sup>d</sup> . . . . .	+ 34	+ 966	+100	+ 4	+10	+322	+1,436
	1950—First half . . . . .	-457	-350	- 34	-127	+ 5	-159	-1,122
	Second half . . . . .	-523	-514	- 67	-510	-351	-542	-2,507
11. Net inter-regional transfer of dollars; errors and omissions	1951—First half . . . . .	-476	-193	+14	+ 40	-284	-158	-1,057
	Third quarter <sup>d</sup> . . . . .	+860	-316	+ 64	+150	+304	-478	+ 584
	1950—First half . . . . .	-19	-248	-140	+163	+134	+ 39	- 71
12. Net inter-regional transfer of dollars; errors and omissions	Second half . . . . .	+160	-352	-274	+ 57	+360	- 36	- 85
	1951—First half . . . . .	+384	-259	-518	+160	+185	-335	- 383
	Third quarter <sup>d</sup> . . . . .	-644	+ 46	-216	+ 24	+ 540	+208	- 42

<sup>a</sup> Other European countries may overstate actual payments, and import figures may understate actual merchandise imports, to the extent that some military aid was given as payment for services. The amount of military aid is as follows (in millions of dollars):

	"Europe"	"All other areas"	"Total world"
1950—First half . . . . .	66	5	71
Second half . . . . .	385	60	445
1951—First half . . . . .	629	134	763
Third quarter <sup>d</sup> . . . . .	694	128	822

<sup>d</sup> At half-yearly rate.

<sup>e</sup> Includes movements of both official and private foreign capital.

<sup>c</sup> Sources: Rearranged from the *Survey of Current Business*, United States Department of Commerce, June 1951 and from data for 1951 communicated directly by the Bureau of Payments Division of the Department of Commerce. For further details, see "Notes to the Statistics".

<sup>a</sup> Dependent overseas territories of European countries and independent members of the sterling area, Indonesia and the dependent overseas territories of Spain are excluded from this group and included in "All other areas".

<sup>b</sup> Includes also international institutions.

<sup>c</sup> Military aid is excluded both from total imports and from government grants. In making this adjustment in the officially published United States balance-of-payments estimates, it has been assumed that all military aid was transferred in the form of goods; consequently, the services balance shown for



### Transactions with the United States

The low ebb of Europe's deficit with the United States was reached during the second half of 1950, largely as a first reaction to the Korean war. Table 36 shows that for Europe, excluding the United Kingdom, the deficit on goods and services dropped to the post-war low of roughly \$400 million,<sup>1</sup> or less than half as much as in the first half of the year, and even most of this was covered by a sudden inflow of private American capital. The developments during 1951 have shown how temporary and illusory this near-balance was: although a relatively high level of exports to the United States was maintained, dollar imports rose rapidly, and the previous surplus on service transactions—\$111 million during the second half of 1950—turned into a deficit.<sup>2</sup>

During the first nine months of 1951, the deficit on goods and services, after allowing for the movement of private American capital,<sup>3</sup> has hovered near an annual level of some \$1.3 billion, or only slightly less than during the six months preceding the Korean war.

Similarly, the United Kingdom achieved its most favourable post-war balance with the United States during the second half of 1950, and its position was further strengthened by the substantial dollar surplus of overseas sterling countries, which enabled the United Kingdom to accumulate more than half a billion dollars in gold and dollar assets in the United States during that period. In 1951, however, its dollar position deteriorated much more than that of Continental Europe; imports from the United States

<sup>1</sup> As noted in Table 36, the calculation of Europe's deficit given here excludes goods or services acquired through military aid.

<sup>2</sup> The deterioration of the services balance of Continental European countries is entirely due to shipping and tourism, as appears from the following comparison of balances during the first three quarters of 1950 and 1951:

	Transportation	Travel	Other	Total
1950	— 13	+132	—27	+92
1951	—180	+100	+14	—66

The deficit on transportation reflects large imports of bulk cargoes, such as coal and grain, from the United States, the worldwide shortages of shipping with the resulting use of laid-up ships from the United States reserve fleet, and the extremely high freight rates in voyage chartering. The decline in receipts from American tourists may be due to some decrease in travel to Europe after the 1950 Holy Year.

<sup>3</sup> It is highly probable that the sudden cessation of capital inflow from the United States to Europe during the third quarter was a response to devaluation rumours; the change was almost entirely in short-term capital. This change offset the slight improvement in the goods and services balance realized during the quarter, as may be seen in the net figures in item 6 of Table 36.

rose progressively during the year and, in the third quarter, a substantial repatriation of short-term United States capital increased the already large deficit. Furthermore, the overseas sterling area's dollar surplus also dropped rapidly and, as stated above, receipts of E.R.P. aid were rapidly dwindling away. As a result, the United Kingdom was forced to liquidate in the United States \$430 million<sup>4</sup> of its earlier accumulated dollar assets in the third quarter. At the same time, other European countries, partly owing to continuing American aid, but partly owing to their intra-European dollar earnings from the also United Kingdom, mentioned above, were able to add \$158 million to their convertible resources.<sup>5</sup>

### Transactions with Other Overseas Areas

In Europe's trade with overseas areas other than the United States, the experience of the United Kingdom again differed from that of other European countries. As shown by Table 37, the former's position sharply deteriorated, both with the countries having currency links with Europe, particularly the overseas sterling area, and with other areas, whereas Continental Europe was more nearly able to hold its own in trade both with affiliated areas (running a larger deficit with the overseas sterling area but a surplus with its own dependent overseas territories) and with the rest of the world. In trade with Latin America, where the expansion of German exports was strong, the previous small deficit even became a surplus.

Although the balance of merchandise trade, covered by Table 37, was, by and large, more favourable with overseas areas outside North America than could

<sup>4</sup> This figure for the third quarter (given at a half-yearly rate of \$860 million in Table 36 for comparison with the earlier half-year periods shown) covers only gold and dollar liquidations reflected in accounts with the United States (much of which, however, may have been used for settlements with other countries, as suggested by the last item of the table). As shown by Table 35, the total reduction in the United Kingdom's gold and dollar balances during the third quarter was almost \$600 million.

<sup>5</sup> This figure covers, as far as gold is concerned, only that part (net) bought from the United States as given in Table 36 (shown there at a half-yearly rate of \$316 million). Table 35 indicates a still larger rise, some \$250 million, in the gold and dollar assets of Continental European countries. The difference between the two figures represents not only gold transactions with countries other than the United States, but also some liquidations of long-term assets in the United States, particularly by France and Norway. Neither figure therefore indicates accurately the change in Continental Europe's total gold and dollar assets, which may be estimated at around \$200 million during the third quarter 1951. This figure includes changes in holdings which technically are classified as "long-term" but in fact can be easily liquidated.

Table 37

TRADE OF WESTERN EUROPE WITH MAJOR AREAS<sup>a</sup>

Billions of current dollars, f.o.b.; year 1950 and January–September 1951 at annual rates

Area of origin for imports and area of destination for exports	Year	United Kingdom			Other western European countries <sup>a</sup>		
		Imports	Exports	Balance	Imports	Exports	Balance
United Kingdom . . . . .	1950	—	—	—	1.8	1.8	—
	1951	—	—	—	2.1	2.7	+0.6
Other western European countries <sup>a</sup> . . . . .	1950	1.8	1.8	—	<sup>a</sup>	<sup>a</sup>	—
	1951	2.7	2.1	−0.6	<sup>a</sup>	<sup>a</sup>	—
Eastern European countries <sup>b</sup> . . . . .	1950	0.2	0.1	−0.1	0.6	0.6	—
	1951	0.2	0.1	−0.1	0.7	0.7	—
United States and Canada . . . . .	1950	1.0	0.7	−0.3	2.4	1.0	−1.4
	1951	1.4	0.8	−0.6	3.2	1.6	−1.6
Overseas sterling area <sup>c</sup> . . . . .	1950	2.2	2.6	+0.4	1.4	0.7	−0.7
	1951	3.3	3.1	−0.2	2.4	1.4	−1.0
Dependent overseas territories <sup>d</sup> . . . . .	1950	0.3	0.1	−0.2	1.6	1.6	—
	1951	0.4	0.2	−0.2	1.9	2.2	+0.3
Other overseas areas <sup>e</sup> . . . . .	1950	1.0	0.8	−0.2	1.9	1.6	−0.3
	1951	1.5	0.8	−0.7	2.6	2.3	−0.3
Total <sup>f</sup> . . . . .	1950	6.5	6.1	−0.4	9.7	7.3	−2.4
	1951	9.5	7.1	−2.4	12.9	10.9	−2.0

Sources: The figures have been derived from Table XXVII in Appendix A.

<sup>a</sup> Seventeen western European countries in Table 1. These countries are here taken as a unit and trade within the area (for which exports would necessarily equal imports) is not shown or included in the totals.

<sup>b</sup> Including the U.S.S.R. and Yugoslavia.

<sup>c</sup> Including British colonies.

<sup>d</sup> Excluding British colonies.

<sup>e</sup> Latin American republics and other overseas areas.

<sup>f</sup> So far as possible import figures were derived from export statistics; therefore total imports do not agree with those reported by the importing country.

be expected in view of the worsened terms of trade, the total current account deficit with this group of overseas countries was probably also affected by increased European earnings from shipping and overseas investments. Very little information is so far available on these transactions during 1951; as a rough indicator, the development of the United Kingdom's earnings from all countries outside western Europe and the dollar area through the first half of 1951 is shown below:<sup>1</sup>

	Transportation <sup>a</sup>	Investment Income	Other	Total
		(millions of dollars)		
1950 - first half . . . . .	+120	+129	+ 70	+319
second half . . . . .	+148	+193	+107	+448
1951 - first half . . . . .	+199	+182	+ 98	+479

<sup>a</sup> Dry cargo only.

<sup>1</sup> United Kingdom Balance of Payments 1948 to 1951 (Cmd. 8379). Both transportation and investment income exclude net earnings from oil transactions, which are included in "other".

The large increase in shipping receipts reflects the rise both in freight rates and in the volume of world trade. Voyage charter rates during 1951 were roughly double the 1950 average; although these rates represent only a portion of the total freight market, there have also been increases, varying from 15 to 35 per cent, in the freights charged for cartel-regulated liner shipping. As to investment income, it represents, of course, only a part of the increased earnings of European-owned companies engaged in raw material production and trade; considerable reinvestments have been made in the producing countries and the actual increase in remittances of dividends and profits to investor countries, or of cash balances, falls far short of the net earnings.<sup>2</sup>

<sup>2</sup> A sample of Malayan rubber companies, for instance, indicates that their net earnings in 1950 were, on the average, about 400 per cent above 1949, while dividends in 1951, paid

During the whole of the period since the end of the war, dollar settlements with countries outside the European currency area—arising both from ordinary trade transactions and from speculative capital movements—have been a considerable drain on the resources of European countries. On balance, these net dollar settlements by Continental Europe appear to have been rather small in 1951, when “offshore purchases” under the E.R.P. programme are taken into account, and they have declined in the course of the year. By contrast, the United Kingdom’s growing trade deficits with several non-sterling countries outside Europe, such as Canada and Cuba, seem to have contributed importantly to the dramatic deterioration in its dollar position during the third quarter. How much of the apparent transfers of this nature were really for *bona fide* dollar settlements cannot be gauged, but the additional dollar transfers attributable to both factors appear to have been of the order of \$250 million in the third quarter, compared with the quarterly rate for the first six months of 1951.<sup>1</sup>

out of these earnings, were only 200 per cent higher. Part of the difference would, however, presumably represent additions to cash balances and (to the extent that they were repatriated) would add to the foreign exchange resources of the mother-country.

<sup>1</sup> The only evidence of these large transfers from the United Kingdom is derived from the “residual item” of the United States balance of payments (see item 9, first column, of Table 36) which, however, necessarily reflects any errors and omissions in the other balance-of-payments items obtained by direct estimate. This information, supplemented by other data on known or estimated inter-regional transfers, gives the following results:

<i>(Quarterly rates—millions of current dollars)</i>			
<i>Transactions</i>	<i>Jan.- June</i>	<i>July- Sept.</i>	
Net interregional dollar receipts (+) or payments (—) by the United Kingdom as deduced from United States balance-of-payments estimates . . . . .	+192	—322	
Less: (1) Estimated net dollar receipts (+) by the United Kingdom from the overseas sterling area . . . . .	+243	+126	
(2) Reported net dollar receipts (+) or payments (—) by the United Kingdom in settlements with E.P.U. . . . .	+47	—106	
<i>Equals: Other transfers</i> . . . . .	—98	—342	

Similar calculations with respect to Continental Europe based on Table 36, after allowing for “offshore purchases” financed by the United States under E.R.P. and for net receipts of dollars from the E.P.U., would indicate that other inter-regional dollar transfers from Continental Europe amounted to about \$150 million during the first nine months of 1951. Here, too, the calculation must be qualified with respect to errors and omissions and clandestine capital outflows, as in the case of the United Kingdom.

## *The Payments Crisis of the United Kingdom*

The violence of the upswing and downswing in the United Kingdom’s payments position during the past two years is to be explained, as already seen in Chapter 1, by a concurrence of movements in the United Kingdom’s own trade and in that of other countries of the sterling area. The effects of these changes were, in both years, magnified by speculative movements.

### *Changes in Sterling Area Reserves and in the Net Foreign Exchange Position of the United Kingdom*

*(Quarterly averages—millions of current dollars)*

	1950	1951		
		First half	Third quarter	Fourth quarter
Gold and dollar reserves	+403	+284	—598	—934
Net claims on or liabilities to E.P.U. . . . .	+56	+47	—255	—528
Sterling area reserves . . . . .	+459	+331	—853	—1,462
Sterling liabilities <sup>a</sup> . . . . .	—228	—582	.. <sup>b</sup>	.. <sup>b</sup>
Change in United Kingdom’s net foreign exchange position . . . . .	+231	—251	..	..

<sup>a</sup> Minus sign indicates an increase in liabilities. Figures relate to liabilities to all countries, not to the members of the sterling area only.

<sup>b</sup> Information on sterling liabilities is released only at six-monthly intervals, and with long delays, in the form of the White Papers on the balance of payments. Data later than June 1951 cannot be expected until March or April 1952. Some indication of changes in sterling liabilities can, however, be obtained from data published by the independent sterling area countries on their foreign exchange assets, which declined by roughly \$800 million in the five months from July to November. Similar data are not available for the colonial territories.

The result was, first, a spectacular increase and then, since mid-1951, an equally spectacular decline in the gold and dollar reserves held by the United Kingdom, accompanied by sweeping changes also in its sterling liabilities to other countries. These liabilities may be regarded from the standpoint of the United Kingdom as an offset to, or potential claim upon, its gold and dollar holdings. Its holdings of gold and dollars are, in fact, formally considered as a reserve pool for all members of the sterling area, whose dollar receipts are paid into, and dollar needs met from, the central reserves, with corresponding additions to or withdrawals from their sterling balances.

The improvement in 1950 of the United Kingdom’s own balance of payments on current account was largely due to a reduction of imports of raw materials and food to a level below current consumption. Thus, the increase in the stock of foreign assets was partly at the expense of a decrease in the stock of goods. For this reason alone, an increase in the volume of imports in 1951 was to be expected.

In the event, the increase in imports was much larger than expected. The main elements of the deterioration in the balance of payments of the United Kingdom can be seen from Table 38, which shows the forecasts of the British Government made at the beginning of the year<sup>1</sup> compared with the actual results as far as they can be estimated at the close of the year. It appears that the official predictions have very nearly come true as regards the volume of exports and the effects of the rise in import and export prices. The gap between forecast and outcome is mainly due to an uncovenanted increase in the volume of imports.<sup>2</sup>

There are three main factors which could have brought this about : a greater increase than expected in industrial production and hence in the consumption

of imported raw materials, a rise in private consumption of imported food and manufactures, or re-stocking. Data given in the following chapter show that, during the first nine months of 1951, private consumption averaged only slightly higher than in 1950 : much of the increase which took place during the first half of the year was cancelled by a drop in purchases of durable goods in the third quarter. Similarly, industrial production rose even less than the 4 per cent which the British *Economic Survey* anticipated. It seems obvious, therefore, that the increase in the volume of imports to a level 15 per cent higher than that of 1950 implies a very considerable re-stocking by private traders and manufacturers. This is confirmed by such direct statistics as are available : out of fifteen major import commodities, stocks rose in twelve cases and declined in only three (cotton, wool and hides and skins). The re-stocking was, of course, facilitated by the liberalization of imports from the E.P.U. area and the hand-

Table 38

CHANGES IN THE UNITED KINGDOM CURRENT ACCOUNT, 1950 TO 1951

Millions of pounds sterling

Item	Estimates of the <i>Economic Survey</i> of 1951 (Cmd. 8195)	Estimated actual development
Effect on current account balance of :		
A. <i>Changes in imports</i>		
1. Increase in the volume of imports <sup>a</sup> at 1950 prices . . . . .	-125	-360
2. Imports of strategic stocks, at 1950 prices . . . . .	-100	
3. Extra cost, due to rises in prices, of imports of strategic stocks . . . . .	- 25	-740 <sup>b</sup>
4. Extra cost, due to rises in prices, of increase in volume of imports <sup>a</sup> . . . . .	-700	
5. Extra cost, due to rises in prices, of maintaining 1950 volume of imports . . . . .		
B. <i>Changes in exports</i>		
1. Increase in volume of exports, at 1950 prices . . . . .	+100	+150
2. Increase in export prices . . . . .	+430	+350 <sup>b</sup>
C. <i>Changes in service transactions</i>		
1. Increase in net services earnings . . . . .	+ 70	(0 to + 40)
Total change . . . . .	-350	(-560 to -600)
Deficit on current account <sup>c</sup> . . . . .	-130	(-340 to -380)

Sources : *Economic Survey for 1951* (Cmd. 8195), H.M.S.O., London, and estimates for actual development by the Research and Planning Division, Economic Commission for Europe. For details, see "Notes to the Statistics".

<sup>a</sup> Excluding imports for strategic stocks.

<sup>b</sup> Estimated on the basis of import and export unit value indices published in the *Board of Trade Journal*, 3 November 1951, page 894. These indices are calculated with current weights (type P<sub>1</sub>).

<sup>c</sup> Current account surplus in 1950 was £221 million.



ing-over of imports of timber and some other important commodities, hitherto procured by Government agencies, to private trade.

As far as the United Kingdom's own over-all balance of payments is concerned, the deterioration in 1951 was thus, to a large extent, an inevitable reaction, wiping out that part of the previous year's improvement which was more apparent than real. The sudden outbreak of the dollar crisis after mid-year, on the other hand, was caused by other factors as well, including the above-mentioned relationship between the overseas sterling area and the central reserves held in London.

In the absence so far of official figures, an attempt has been made in Table 39 to estimate roughly the composition of the large dollar deficit of the sterling area in the third quarter of 1951. Subject to such modifications in the analysis as may be necessary when more definitive data become available, these estimates indicate that more than one-third of the deterioration from the first six months to the third quarter of the year (and possibly about one-half of the actual gold and dollar losses during the third quarter) may be accounted for by speculative movements and by transactions with non-dollar areas. The remainder of the deterioration is due to the increase in the deficit on the United Kingdom's own direct transactions with the dollar area, to the swift decline in the dollar surplus of overseas sterling countries and to the reversal from a surplus to a deficit in the position of the sterling area as a whole with the E.P.U.

A further sharp deterioration in the gold and dollar position during the last quarter of the year was announced by the Chancellor of the Exchequer on 7 January 1952: the sterling area's gold and dollar deficit amounted to \$320 million in the single month of October and, in the two months November and December, totalled \$444 million. These deficits, together with \$176 million paid at the end of the year as the first instalment of service on the United States and Canadian loans, brought a record drain of \$934 million in the gold and dollar reserves<sup>1</sup> during the quarter. Apart from the loan service payments, the main factors accounting for the drain appear to have been about the same as in the third quarter: a further reduction was reported in earnings from exports to the dollar area, both from the United Kingdom and from other sterling countries, and the sterling area's

deficit with western Europe entailed gold payments of \$98 million to E.P.U., or only slightly less than in the third quarter.

The remedial measures announced up to the end of the year have been aimed chiefly at rectifying the deficit with the E.P.U. through a partial retreat from trade liberalization and cuts in imports from western European countries. More difficulty may be encountered in reducing the United Kingdom's imports from the dollar area, which, in the third quarter of 1951 were double the average for 1950, while the value of its dollar exports had increased by only about one-fourth. Imports from the dollar area in the fourth quarter are reported to have continued on a high level, and whatever relief can be expected from the cessation of stockbuilding is likely to be offset by increased dollar expenditure on other commodities. The recent agreement on steel supplies reached between the Governments of the United Kingdom and the United States, although it will permit a higher level of British industrial production than would otherwise have been possible, does so at a heavy dollar cost. Moreover, the latest grain harvests in Argentina and Australia have been poor and their exportable surplus may be reduced, while the unfavourable prospects for the development of East-West trade in Europe make it possible that the United Kingdom will get less than the desired amount of coarse grain from the Soviet Union.

The rapid fall in the dollar surplus of the overseas sterling area may prove to be more tractable. Despite the further reduction announced for the fourth quarter in exports to the dollar area, there is some reason to conclude from the analysis made in Chapter 1 that United States demand for sterling area products may tend to revive, although there is little probability that increased sales would bring anything like the dollar yields obtained earlier in the year when raw material prices were at their peak. Any recovery in dollar exports, moreover, may tend to be offset by heavy purchases from the United States, particularly by the independent members of the sterling area, unless there is an effective curb on demands stimulated by the earlier inflation after Korea. The difficulty of holding down dollar imports is enhanced on the one hand by the desire of some of these countries to proceed with their development programmes and on the other by the limited availability of metal and engineering exports from the United Kingdom for reasons already described in

<sup>1</sup> After allowing for \$6 million still received under E.R.P.



**Table 39**  
**COMPONENTS OF CHANGES IN THE UNITED KINGDOM'S GOLD AND DOLLAR RESERVES <sup>a</sup>**  
*Quarterly rates, millions of current dollars*

Item	1950		1951		Change from first half to third quarter 1951 <sup>b</sup>
	First half	Second half	First half	Third quarter <sup>a</sup>	
<b>1. United Kingdom</b>					
Imports from dollar area . . . . .	-284	-316	-420	-600	-180
Exports to dollar area . . . . .	+187	+256	+265	+280	+ 15
Trade balance . . . . .	- 97	- 60	-155	-320	-165
Services (net) . . . . .	+ 19	- 11	+ 2	- 40	- 42
Current account balance . . . . .	- 78	- 71	-153	-360	-207
Government loans, sales and redemption of investments, etc. . . . .	- 10	- 13	- 9	- 9	—
Total . . . . .	- 88	- 84	-162	-369	-207
<b>2. Rest of sterling area</b>					
Imports from dollar area . . . . .	-188	-170	-273	-329	- 56
Exports to dollar area . . . . .	+275	+333	+518	+476	- 42
Other transactions not elsewhere specified <sup>c</sup> . . . . .	—	- 35	- 38	- 70	- 32
Gold sales to United Kingdom . . . . .	+ 75	+ 66	+ 58	+ 60	+ 2
Total . . . . .	+162	+194	+265	+137	-128
<b>3. Whole sterling area</b>					
Net gold and dollar settlements with E.P.U. countries	- 9	- 19	+ 36	-106	-142
<b>4. Other financing transactions</b>					
Drawings on Canadian credit . . . . .	+ 23	—	—	—	—
E.R.P. grants and credits . . . . .	+235	+146	+ 77	+ 40	- 37
Total . . . . .	+258	+146	+ 77	+ 40	- 37
<b>5. Total of items listed (1 through 4) . . . . .</b>	<b>+323</b>	<b>+237</b>	<b>+216</b>	<b>-298</b>	<b>-514</b>
<b>6. Change in gold and dollar reserves . . . . .</b>	<b>+368</b>	<b>+439</b>	<b>+284</b>	<b>-598</b>	<b>-882</b>
<b>7. Unaccounted items : residual (6 less 5) . . . . .</b>	<b>+ 45</b>	<b>+202</b>	<b>+ 68</b>	<b>-300</b>	<b>-368</b>
Transactions with non-dollar areas . . . . .	- 2	+ 22	+ 28	..	..
Change in American Account balances . . . . .	+ 1	+ 67	- 9	..	..
Other capital movements . . . . .	+ 46	+113	+ 49	..	..

<sup>a</sup> Figures for the third quarter 1951 are estimates of the Research and Planning Division, Economic Commission for Europe; other data are derived from *United Kingdom Balance of Payments, 1948 to 1951* (Cmd. 8379), H.M.S.O., London.

<sup>b</sup> Sign indicates effect on dollar deficit and reserves.

<sup>c</sup> Including an estimate for transactions of the Union of South Africa.

Chapter 2. This dilemma again emphasizes that the present payments crisis of the United Kingdom stems in large part from the conflict between a necessarily moderate rate of increase in production and a relatively ambitious armaments programme.

Speculative capital movements, though probably of considerable importance in the present dollar crisis,<sup>1</sup> are a much less basic problem than the actual changes in the balance on goods and services account. Since these capital movements emanate chiefly from short-term speculation about Government policy, they tend to be self-correcting to a considerable extent and are highly susceptible to manifestations of that policy.<sup>2</sup> The recent widespread speculation against sterling witnesses, incidentally, an *idée fixe* in business circles which appear to take for granted that balance-of-payments difficulties spell devaluation, even in a situation where, given existing rigidities in export availabilities and import requirements, no relief for the payments position could conceivably result from such a move.<sup>3</sup>

<sup>1</sup> Some indication of the possible order of magnitude of speculative capital movements during the third quarter, and of the changes in their size during the year, is given by the residual item (No. 7) in Table 39 and also, as commented upon previously, by the data derived from the United States balance-of-payments estimates on page 74 above. An element of uncertainty common to both sets of data, and hence to the present comments regarding the relative importance of clandestine capital movements, is the amount of normal gold and dollar settlements to countries outside the dollar, the sterling and the E.P.U. areas.

<sup>2</sup> Three main forms of speculative capital movements, not equally vicious, can be distinguished: (1) First, movements on so-called "American account" sterling balances, i.e. sterling held on special accounts in London by residents of the United States and other "dollar countries". Movements on these accounts are left free of exchange control. (2) Secondly, changes in terms of payments in ordinary, commercial transactions can cause wide fluctuations in the amounts of short-term commercial credit obtained and given and thereby heavily influence the foreign exchange position. The importance of these movements was seen during the months preceding the 1949 devaluation, when the sterling area's export receipts fell short of, and payments for imports exceeded, the actual trade movements. In the summer of 1951, speculative changes in commercial credits appear to have acted as a disturbing factor, not only in dollar trade, but also in transactions within the E.P.U. Both forms of speculative capital movements just mentioned are, however, of a short-term nature and therefore self-correcting, or at least self-exhausting (the change-over, say, from imports against three months credit to imports against cash payment can be made only once). (3) The third main form of speculative movement is the clandestine capital flight, by way of under-invoicing of exports and other illegal transactions. It is in the nature of this type of capital flight that funds, once transferred from sterling, rarely return; on the other hand, the amount of funds thus withdrawn through illegal channels can hardly increase violently in response to short-term speculative attitudes.

<sup>3</sup> Even in the case of textile exports, the lowering of export prices through devaluation would be unlikely to relieve appreciably the growing difficulties encountered in competition with Far Eastern producers, as discussed in section 4 of this chapter.

### *Divergent Trends in Continental Europe*

With the exception of France, which had to face a dollar crisis of its own, payments difficulties of western continental European countries in 1951 manifested themselves mainly within the framework of the European Payments Union. The earlier analysis has already shown, however, that the very nature of the E.P.U.-sterling area relationship and the difficulties faced by the United Kingdom served to shelter Continental European countries from the full consequences of the fluctuations which have occurred since Korea in international prices and trade.

Even in more normal circumstances, it was to be expected that the structural weakness of the E.P.U. would make itself felt after an initial period during which the credit quotas would absorb the existing disequilibria. In any case, a pre-condition—though not the only one—for a smooth functioning of the mechanism was clearly that the direction and pace of economic developments in individual member countries would remain fairly uniform. However, the economic atmosphere in which the E.P.U. was planned had already changed radically when the Union began its operations in the second half of 1950. Since then, large shifts in the pattern of international trade have occurred, affecting different countries in varying degrees according to the extent of rearmament, either planned or actually undertaken, and differences in the incidence of price changes and monetary policies.

These new forces even transcended traditional differences in economic policy, and so it was that the French balance-of-payments crisis has some similarity to that of the United Kingdom. In both cases the difficulties arose from inflationary tendencies (however different were their internal manifestations), and the crisis was characterized by a large deficit with the E.P.U. together with dollar difficulties appearing towards the end of the year.<sup>4</sup>

At the other extreme are the countries—Belgium, Italy and Switzerland—where neither devaluation nor, so far, rearmament has violently changed the economic climate in the direction of inflation. In these countries, the main effect of the new factors was to give a fillip to exports, and they developed a heavy surplus in trade with the E.P.U. area. Western Germany, since its temporary debtor position in the E.P.U. was corrected in the course of 1951, also belongs to this group.

<sup>4</sup> The monthly balances of individual E.P.U. countries are shown in Table XX, in Appendix A.

Denmark and the Netherlands are in an intermediate position: their balances of trade improved considerably in the course of the year owing to a reversal of monetary policies and helped, in the case of Denmark, by more favourable export prices. An additional factor was the improvement in shipping receipts, and in the second half of the year the previously large over-all balance-of-payments deficits of these two countries began to diminish and their cumulative deficit within the E.P.U. fell to the gold-free part of their quotas. In the Netherlands, the reversal of the external position was so complete that the year 1951 as a whole will probably show no deficit on the balance of payments on current account. In Denmark, the fourth quarter of 1951 showed a surplus on current account of some \$25 million against an average quarterly deficit of some \$30 million in 1950 and the first three quarters of 1951.

Only for Sweden, Finland and, perhaps, Norway, did external conditions develop so favourably that internal inflation could proceed without immediate adverse repercussions on the balance of payments.

#### French Difficulties

Until the spring of 1951, the payments position of France developed favourably. Its surplus position in the E.P.U.—largely the counterpart of the western German deficit—was accompanied by an exceptional boom in exports to the United States, which, during the first three quarters of 1951, averaged more than twice their 1950 level in dollar value. The increase was largely in steel products and chemicals, particularly industrial alcohol, not ordinarily exported by France to the United States in significant amounts.

This improvement in the French trade balance made it possible, for some time, to restrict exports of scarce materials and to stimulate imports of consumer goods in order to exert a downward pressure on the price level. It is difficult to judge to what extent these measures actually helped to restrict inflation, but they undoubtedly contributed to the re-emergence of the balance-of-payments difficulties in the latter half of the year. This deterioration of the foreign balance, induced by the anti-inflationary policy, was enhanced by the fact that the efforts to combat inflation were, on the whole, unsuccessful: in some fields export difficulties arose in consequence of the increase in the French cost level, and there also appeared to be some shift in exports towards the

sheltered markets in French overseas territories. As shown by the following figures, the trade balance deteriorated sharply both with the dollar area and with E.P.U. countries.

#### Trade Balance of France with Countries outside the French Union<sup>a</sup>

(Quarterly rates—millions of current dollars)

	January-June	July-Sept.	Oct. and Nov.
Dollar area . . .	— 60	— 100	— 141
E.P.U. area . . .	— 94	— 230	— 168
Other areas . . .	— 9	+ 14	+ 15
	— 163	— 316	— 294

<sup>a</sup> Exports, f.o.b.; imports, c.i.f.

The loss of foreign exchange reserves became alarming in the closing months of the year: official holdings of the Bank of France of foreign currencies of all kinds,<sup>1</sup> both dollars and other currencies, which had risen to a peak of \$553 million in March, fell with quickening tempo to only \$91 million at the end of November.<sup>2</sup> While much of this loss was occasioned by settlements with E.P.U. (mainly in the form of a shift from a credit to a debit position), the drain of hard-currency reserves to the dollar area seems to have been much greater than could be attributed to the increase in the trade deficit alone and to have been caused in large part by a stepping-up of advance payments by importers and possibly some outflow of

<sup>1</sup> Changes during the year in official gold and foreign exchange assets of the Bank of France (which do not necessarily reflect all international settlements made by France) are given below together with the reported settlements with E.P.U.:

	(Millions of current dollars)		
	Jan.-June	July-Sept.	Oct.-Nov.
Increases (+) or decreases (—) in foreign exchange reserves	+ 23	— 87	— 284
Settlements with E.P.U.:			
(1) in dollars or gold . . .	+ 20	— 43	— 17
(2) in credit . . . . .	+ 20	— 43	— 188

No comprehensive data are available on changes in that part of the foreign exchange reserves held in gold and dollars (the figures given in Table 35 being limited to French-owned dollar balances as reported by banks in the United States). Some indication of the trend is given, however, by the following figures showing the excess of purchases (+) or sales (—) of dollars by the Stabilization Fund on the official foreign exchange market, as reported by the Minister of Finance on 16 November 1951 (in millions of dollars):

January-June, + 33; July-September, — 53; October, — 67.

<sup>2</sup> The decrease in net holdings was still larger, since the figure for November does not include the credit received by France from the European Payments Union, amounting to \$67 million. The figure of \$91 million does not cover the gold reserve of the Bank of France, which has remained stable at \$547 million during the second half of 1951, nor advances to the Stabilization Fund (indicative, to some extent, of the foreign exchange holdings of the Fund), which dropped from \$398 million in March 1951 to \$277 million at the end of November.

private funds by other means. The dollar outlook, moreover, was darkened by the continued need to import American coal and by prospective grain purchases in North America following the short crop in France and North Africa, and also to meet French export commitments to western Germany under the International Wheat Agreement. The menace of a serious cut in the 1952 dollar import programme was, however, averted by assurances received from the United States that its economic aid, together with United States military expenditures in France, would amount to \$600 million during the 1951/52 fiscal year.

The recurring payments crises in France result largely from the inability to bring internal inflation under control and the ease with which private capital can evade the ensuing inconveniences.<sup>1</sup> Although the undertaking of a relatively ambitious defence programme (including the heavy burden of the war in Indo-China), together with the political difficulties involved in cutting private expenditure, accounts for a substantial portion of the recent payments crisis, the impact of the crisis has indeed been magnified by the traditional ease with which private commercial capital, once confidence in the currency is disturbed, can safeguard itself. Another important development—although its effect on official reserves is difficult to estimate—is the purely speculative capital outflow into gold and hard currencies. Flight from the franc is notoriously easy: a legal gold market operates in Paris, and during each confidence crisis the foreign exchange black market apparently diverts considerable amounts of foreign exchange from official channels (in the form, for instance, of tourist dollars), while the easy export of banknotes keeps the free exchange markets abroad well supplied.

#### *The E.P.U. Creditors*

The structure of Belgian and Italian trade tends to place both countries in a deficit position with the dollar area, partially offset by a surplus in trade with western Europe. In the autumn of 1951, both the Belgian and the Italian creditor positions in the E.P.U. exceeded their quotas,<sup>2</sup> owing primarily to a sudden increase in their trade surpluses with France and the United Kingdom. The amplitude of the movements

was enlarged by the inflow of flight capital and by speculative changes in the terms of payment in commodity trade.

The Belgian export boom was by no means general; in fact, several important export industries—particularly the textile industry—have recently been suffering from a recession of demand, as noted in Chapter 2. Furthermore, the steel export boom came after a period of acute difficulties with severe cuts both in export prices and in production. The feast-and-famine conditions of the industry have been given as the main reason for Belgium's reluctance to restrict exports to E.P.U. countries and to levy substantial export taxes.

The persistent disequilibria within the Payments Union have generally been counteracted by discriminatory policies aiming at restricting the imports of debtor countries from other E.P.U. countries by a retreat from liberalization. The most important instances of this were the German restrictions in the spring and the British restrictions towards the end of 1951. Conversely, creditors have adopted various measures to restrict commodity exports to (and inflows of capital from) other member countries, while they have been more reluctant to resort to internal expansion. It is significant that the big creditors in the Union are all countries where substantial unemployment has persisted, even during the general expansionary environment since Korea. Thus, the corrective measures adopted by the Belgian Government in the fourth quarter of 1951 took the form of some tightening of export licensing and a temporary freezing of a certain percentage of export proceeds. Later, these measures were followed up by a small export tax, varying from 1 to 3 per cent.

The Italian Government followed a different policy. In spite of Italy's growing surplus in the E.P.U., the general export position of the country was not such as to suggest restrictions on sales abroad. Therefore, the alternative course was chosen of encouraging imports by an extension of liberalization and a reduction of customs duties, despite the danger of adverse effects on home market industries. Western Germany also, as its debtor position in the E.P.U. was rapidly diminished in the course of the year, began a gradual return to the liberalization of imports in January 1952. Apart from these special cases, the counter-measures of debtors and creditors alike appear to have been generally in the direction of downward rather than upward balancing. There is, however, an important

<sup>1</sup> Various French estimates, all necessarily very impressionistic, exist of the magnitude of capital flight from the French franc into gold and hard currencies. Generally, the figure is put at between \$400 and \$600 million per year.

<sup>2</sup> See Table XX in Appendix A.



difference from the situation existing before the establishment of the E.P.U. : import restrictions by one country do not necessarily give rise to retaliatory measures by other countries leading to the well-known spiral of trade contraction. The principle, at least, underlying the Payments Union is that expansive or contractive measures by one country are supported, after international consultations, by complementary contractive or expansive measures in other member countries.

Although the counter-measures have, as a rule, taken the form of general modifications of the liberalization policy affecting trade with the E.P.U. area as a whole, there are also examples of action taken, or contemplated, against a particular bilateral unbalance within the E.P.U. network—a procedure which is hardly in accordance with the basic idea of the Union. Thus, at the time when extreme creditor and debtor positions were held by Belgium and the Netherlands respectively, it was commonly argued that the solution was to be found in a balancing of trade between the two countries, and in December 1951 Switzerland imposed restrictions on certain exports to the sterling area in particular in order to reduce its E.P.U. surplus.

The exhaustion of the quotas by some countries and the ensuing necessity for gold settlements for liberalized imports, co-existent with restrictions on imports from the dollar area, form the main threat to the continued functioning of the E.P.U. and are bound to do so as long as members have serious difficulties in balancing their dollar accounts.<sup>1</sup> An additional, though perhaps more temporary, difficulty lies in the present cash position of the Union. The large deficits have recently been concentrated on those countries which happened to have the largest quotas—namely, the United Kingdom and France—while surpluses burden the small quotas of Belgium and Italy. The result was that, in the last months of the year, the liquid resources of the E.P.U. fell to a dangerously low level after heavy gold payments to surplus countries. There has not yet been any official decision as to how this problem will be met, although the major alternatives would appear to be either a revision of member quotas (which were determined originally on the basis of the value of the 1949 trade turnover), or a revision of percentages governing gold and credit settlements, or an additional contribution by the United States to the working funds of the Union.

<sup>1</sup> See SURVEY for 1949, page 107.

### 3. THE TRADE OF EASTERN EUROPEAN COUNTRIES

No contribution to the solution of western Europe's growing balance-of-payments problems, or to the difficulties experienced in developing production in eastern Europe, came from revived trade between the two areas. On the contrary, trade between eastern<sup>1</sup> and western Europe in 1951 declined further from the already abnormally low level it had reached by 1950, and, judging from present trends, there are prospects of still greater difficulties in the near future.<sup>2</sup> The only exception to the general picture of shrinking commercial relations was provided by the northern countries. The volume of exports from the three Scandinavian countries to eastern Europe increased in 1951

by about 10 per cent, as can be seen from Table 40. A particularly big increase was recorded by Finland, whose commercial exports to the Soviet Union are being developed in substitution for deliveries on war reparations account, which will come to an end in 1952.

Total imports by western European countries from eastern Europe probably also declined somewhat, although higher prices caused their money value to increase by 28 per cent. Owing to the smaller increase in prices for exports from western Europe to eastern Europe, the latter had a larger trade surplus than in the preceding year. However, the purchasing power of the surplus in terms of the overseas raw materials most needed by eastern European countries may have risen only slightly.

It is illustrative of the continued shrinkage of trade between the two areas that, in the first nine months of 1951, exports to eastern Europe (not including eastern Germany and Yugoslavia) amounted in terms

<sup>1</sup> The term "eastern Europe", as used here, includes the Soviet Union, but not Yugoslavia. Eastern Germany also had to be disregarded in the data on East-West trade since it has only recently begun to be shown as a separate country of origin and destination in the trade statistics published by most western European countries.

<sup>2</sup> For a fuller discussion of recent developments in East-West trade, see *Economic Bulletin for Europe*, Vol. 3, No. 2, pages 49-66.



Table 40

TRADE BETWEEN EASTERN AND WESTERN EUROPEAN COUNTRIES

Annual rates for first 9 months of each year

	United Kingdom		France, west. Germany, Belgium-Luxembourg and Italy		Denmark, Norway and Sweden		Finland <sup>a</sup>		Total of eighteen western European countries	
	1950	1951	1950	1951	1950	1951	1950	1951	1950	1951
<i>Trade with six eastern European countries <sup>b</sup></i>										
Current value:										
Imports (c.i.f.) (Millions of dollars) .	172	243	175	199	135	185	57	95	705	899
Exports (f.o.b.) (Millions of dollars) .	74	47	230	209	108	148	34	84	585	655
Volume (January–September 1950=100)										
Exports . . . . .	100	55	100	78	100	109	..	..	100	91
of which machinery and vehicles .	100	48	100	70	..	..	..	..	..	..
<i>Trade with Yugoslavia</i>										
Current value:										
Imports (c.i.f.) (Millions of dollars) .	33	27	44	57	7	4	1	1	104	109
Exports (f.o.b.) (Millions of dollars) .	16	29	72	84	5	10	—	1	114	155
Volume (January–September 1950=100)										
Exports . . . . .	100	164	100	97	..	..	..	..	100	111
of which machinery and vehicles .	100	270	100	114	..	..	..	..	..	..

Sources: Statistics of the western European countries.

<sup>a</sup> Excluding exports for war reparations which amounted to \$34 million in 1950 and \$56 million in 1951.

<sup>b</sup> Bulgaria, Czechoslovakia, Hungary, Poland, Rumania and the U.S.S.R.

of value to only 2.4 per cent of the total exports of western European countries, against 3 per cent in 1950 and 5 per cent in 1949.

Exports from western Europe to Yugoslavia increased considerably. It can be seen from the table that in 1951 the value of exports from the United Kingdom to Yugoslavia was more than half as large as British exports to the other six eastern European countries taken together.

*Trade within Eastern Europe*

From the scattered data available on trade among eastern European countries in 1951,<sup>1</sup> three main tendencies seem to emerge: first, a very considerable increase in eastern Germany's trade with the other countries of the area; secondly, a further large increase in trade between the Soviet Union and other eastern European countries; and, thirdly, a rather small

increase, compared with previous years, in the volume of trade among the countries of the region other than the Soviet Union and eastern Germany.

Eastern Germany's trade with other countries within the region began to expand already in 1950, when it rose to a level 43 per cent higher than the year before. In the second and third quarters of 1951, the increase over the previous year was, however, of the order of 80 to 90 per cent. Exports from eastern Germany consist mostly of chemicals and engineering products, and the increase was particularly big in trade with the smaller eastern European countries, Hungary, Bulgaria and Rumania.

In 1949, Soviet trade with Czechoslovakia and Poland increased by about 50 per cent and with Rumania and Hungary by about 100 per cent. In 1950, the increase in trade between the Soviet Union and all eastern European countries (except Yugoslavia) was of the order of 20 to 30 per cent. No data for 1951 have so far been made known, but, judging from plan figures for individual countries, the increase

<sup>1</sup> For the years 1949 and 1950, estimates of the value of trade between each pair of eastern European countries are shown in the *Economic Bulletin for Europe*, Vol. 3, No. 2, Table XXII.

over the previous year would seem to be roughly the same as from 1949 to 1950. The level of trade between the Soviet Union and eastern European countries is now many times higher than before the war, but, owing to the lack of current statistics, it is not possible to be precise about the orders of magnitude involved.

The volume of trade between eastern European countries other than the Soviet Union and eastern Germany seems, as mentioned, to have changed little between 1950 and 1951. Since the traditional pattern of production in these countries is not complementary

to any large extent, the clue to a further increase of trade among them is the mutual adaptation of production plans so as to provide for a higher degree of specialization. Several new long-term trade agreements were concluded in 1951 covering generally the period of national production plans. It was shown in Chapter 2 that considerable progress has been made towards closer economic integration, in particular through the development of exports of engineering products from eastern Germany and Czechoslovakia to other countries within the area.

#### 4. EUROPE'S COMPETITIVE POSITION IN OVERSEAS MARKETS

One important problem concerning Europe's overseas exports in the post-war period is, as often stressed, the growing tendency for overseas countries, anxious to promote their economic development, to devote the largest possible share of their purchasing power for imports to the purchase of capital goods rather than consumer goods.

In spite of the fact that Europe's exports to overseas traditionally consist to a large extent of consumer goods, this shift in the structure of overseas countries' demand for imports has not, so far, prevented a remarkable growth, since the war, in Europe's exports to overseas, both in capital goods and in consumer goods. The main reason for this is that the desire of under-developed countries to concentrate on imports of capital goods was matched by the dire necessity for imports of consumer goods in the face of acute shortages after the war.

The latent problem of adapting the commodity composition of Europe's overseas exports to the new pattern of demand has, however, been sharpened by the turn to rearmament in western Europe and by the increase in home production in overseas countries. On the one hand, rearmament tends to reduce Europe's ability to meet the challenge of increased demand for capital goods from overseas; on the other hand, experience in European countries has already shown that it is easier to limit home demand for manufactured consumer goods than to effect the actual transfer of labour and other resources from the consumption to the investment and armament sectors, so that the upshot, at least in the short run, may well be an increase in the amount of consumer goods seeking markets outside Europe. Meanwhile, the recovery and expansion of production of consumer goods in overseas

countries is proceeding. In this respect, the most important recent development is the rapid recovery of Japanese industry from its abnormally low post-war level of output.

The factors now determining Europe's position on overseas markets can thus be typified by two broad groups of commodities: (1) metals and engineering products where the problem is mainly one of export availabilities, and (2) textile manufactures where problems of marketing are paramount. These two groups of commodities are now to be considered in turn.

##### *Exports of Metals and Engineering Products*

Table 41 shows for six European countries and for the United States the changes in the volume of exports from 1949 to 1950 and from 1950 to 1951, specified for a few major commodity groups and broken down between exports to Europe and to all other destinations. More detailed information can be found in Tables XXV and XXVI of Appendix A.

With few exceptions, the figures for individual countries and for particular commodity groups show the same broad tendency as that found for European exports as a whole: exports to overseas increased in 1951 considerably more than intra-European trade, while in 1950 the shift had been in the opposite direction. The main exceptions to this generalization are that, in both years, the expansion of German exports was relatively much stronger in overseas markets, and that British exports of motor vehicles to overseas countries failed to increase from 1950 to 1951, due to reduced sales in Canada and to temporary transport difficulties handicapping shipments to some other overseas markets.

**Table 41**  
**EXPORTS FROM SELECTED WESTERN EUROPEAN COUNTRIES AND FROM THE UNITED STATES TO EUROPE**  
**AND TO OVERSEAS COUNTRIES BY MAJOR COMMODITY GROUPS**

*Annual rates for first 9 months of each year*

Exporting country	Area of destination	Total exports, 1-10		3. Metals and manu- factures		4. Machinery		5, 6. Vehicles and other transport equipment		8. Textiles	
		Index numbers of volume	Current value in 1951 (Millions of dollars)	Index numbers of volume	Current value in 1951 (Millions of dollars)	Index numbers of volume	Current value in 1951 (Millions of dollars)	Index numbers of volume	Current value in 1951 (Millions of dollars)	Index numbers of volume	Current value in 1951 (Millions of dollars)
		1950 (1949 = 100)	1951 (1950 = 100)	1950 (1949 = 100)	1951 (1950 = 100)	1950 (1949 = 100)	1951 (1950 = 100)	1950 (1949 = 100)	1951 (1950 = 100)	1950 (1949 = 100)	1951 (1950 = 100)
Belgium-Luxembourg . . . .	Europe . . . .	105	119	75	133	100	87	56	100	164	98
	Overseas . . . .	106	156	74	184	93	140	105	223	66	143
France . . . . .	Europe . . . .	134	112	149	128	100	141	114	106	130	105
	Overseas . . . .	124	141	148	148	103	142	115	154	108	121
Western Germany . . . . .	Europe . . . .	201	135	214	119	323	146	394	139	139	173
	Overseas . . . .	273	254	281	218	488	284	419	405	64	257
Italy . . . . .	Europe . . . .	142	111	108	144	115	112	77	133	198	115
	Overseas . . . .	96	117	73	109	78	144	133	104	85	128
Switzerland . . . . .	Europe . . . .	107	124	80	102	111	109	78	87	129	114
	Overseas . . . .	105	146	79	115	100	131	132	136	103	141
Total of five countries . . . .	Europe . . . .	139	122	124	127	155	127	124	122	155	112
	Overseas . . . .	120	153	125	170	113	166	124	168	94	129
United Kingdom . . . . .	Europe . . . .	127	98	101	89	118	100	132	110	153	100
	Overseas . . . .	109	108	117	95	101	108	131	97	88	113
United States <sup>a</sup> . . . . .	Europe . . . .	72	113	62	94	103	93	76	85	80	131
	Overseas . . . .	83	130	65	121	74	156	82	146	68	140

NOTE. — For sources and a definition of the commodity groups, see "Notes to the Statistics".

<sup>a</sup> Annual rate based on first 8 months for 1951.

It further appears from the table that United States exports to European and to non-European destinations rose from 1950 to 1951 by 13 and 30 per cent, respectively. The increase was, if anything, stronger for engineering products than for other commodity groups. In last year's SURVEY, it was suggested that the new demands on the output of United States industry arising from the decision to rearm would tend to restrict export availabilities in 1951, particularly in the field of capital equipment. Actual developments so far might seem to have gone counter to this expectation. It must be remembered, however, that American exports were at a relatively low level in the first half of 1950. This was a period when restrictions on purchases from the dollar area were tightened in several overseas countries—largely as a delayed reaction to the economic recession in the United States in 1949 and the fall in its imports—and at the same time the effects of the devaluation of European currencies were beginning to be felt. In 1951, the tendency in overseas countries was rather to relax restrictions on dollar imports and, in the general atmosphere of increased world demand, competitive factors became less important. It may therefore be that 1949 provides a more relevant basis than 1950 for measuring the comparative level of United States exports in 1951. The figures below show the changes since 1949 in the volume of exports from six European countries together with the changes in United States exports. Trade between Europe and the United States is excluded from this comparison.

*Percentage Changes in the Volume of Overseas Exports<sup>a</sup>  
First 9 months of each year*

	1949 to 1950	1950 to 1951	1949 to 1951
<i>All commodities :</i>			
From 6 European countries . . .	+ 9	+23	+35
From the United States : <sup>b</sup>			
1. Including exports to Canada	-17	+30	+ 8
2. Excluding exports to Canada	-22	+33	+ 4
<i>Machinery, vehicles and other transport equipment :</i>			
From 6 European countries . . .	+14	+16	+33
From the United States : <sup>b</sup>			
1. Including exports to Canada	-23	+51	+17
2. Excluding exports to Canada	-27	+51	+10

<sup>a</sup> Excluding trade between Europe and the United States.

<sup>b</sup> For 1951, figures are based on the first 8 months.

It appears that the recent expansion of United States exports to markets outside Europe has not much more than brought them back to the level of

the first nine months of 1949. This result, of course, is influenced by the restrictions which have been imposed in the United States on exports of scarce basic materials. However, even if exports of machinery and vehicles only are considered, the increase over the two-years period from 1949 to 1951 appears to be no more than 17 per cent, as against an increase of 33 per cent in western Europe's exports to overseas markets other than the United States.

The increase in United States exports from 1949 to 1951 was heavily concentrated on Canada. If exports to Canada are disregarded, the increase in exports of engineering products over the two years was no more than 10 per cent. This is only part of a general tendency for exports of capital goods, both from Europe and from the United States, to be directed to the Western Hemisphere. Other elements in this development are the increased sales from the United States to Latin American countries, the particularly strong expansion of western Germany's exports to these countries and the extraordinary exports of steel and other materials for heavy industry from Europe to the United States. Table 42 shows the percentage distribution by main areas of destination of total exports of metals and engineering products from three leading exporters—the United Kingdom, western Germany and the United States. In the years 1949, 1950 and 1951, the Western Hemisphere

**Table 42**

**DISTRIBUTION OF TOTAL EXPORTS OF METALS  
AND ENGINEERING PRODUCTS <sup>a</sup> FROM THE  
UNITED KINGDOM, WESTERN GERMANY AND  
THE UNITED STATES  
ACCORDING TO DESTINATION**

Area of destination	Percentages <sup>b</sup>		
	1949	1950	1951
Canada and United States . . .	13	13	16
Selected Latin American countries	19	17	21
Australia, New Zealand and the Union of South Africa . . .	12	13	11
Other selected overseas sterling area countries <sup>c</sup> . . . . .	10	8	7
Other overseas countries . . . . .	18	15	15
Europe . . . . .	28	34	30
Total . . . . .	100	100	100

Sources : See " Notes to the Statistics ".

<sup>a</sup> Groups 3-6.

<sup>b</sup> Based on values at constant prices.

<sup>c</sup> India, Pakistan, British Malaya, Singapore, British East Africa and Northern and Southern Rhodesia.



Table 43

DISTRIBUTION OF EXPORTS OF PRINCIPAL GROUPS OF METALS AND ENGINEERING PRODUCTS  
FROM THE UNITED KINGDOM, WESTERN GERMANY AND THE UNITED STATES  
ACCORDING TO DESTINATION

First 9 months of each year

Percentages<sup>a</sup>

Commodity group	Western Hemisphere <sup>b</sup>			Total Europe and high income overseas countries <sup>c</sup>			Other overseas countries		
	1949	1950	1951	1949	1950	1951	1949	1950	1951
3. Metals and manufactures . . . . .	32	28	36	41	48	43	27	24	21
4. Machinery . . . . .	32	30	36	40	48	42	28	22	22
5, 6. Vehicles and other transport equipment . . . . .	33	33	39	40	44	39	27	23	22
Total, groups 3 - 6 . . . . .	32	30	37	40	47	41	28	23	22

NOTE. — For sources and a definition of the commodity groups, see "Notes to the Statistics".

<sup>a</sup> Based on values at constant prices.

<sup>b</sup> Argentina, Brazil, Canada, Chile, Colombia, Cuba, Mexico, Peru, United States, Uruguay and Venezuela.

<sup>c</sup> Australia, New Zealand and the Union of South Africa.

absorbed 32, 30 and 37 per cent, respectively, of total exports from these three countries in the commodity groups considered. The shares received by Europe and the high-income British Commonwealth countries (Australia, New Zealand and the Union of South Africa) remained more stable over the three years, while all other countries, including predominantly the under-developed areas in Asia and Africa, had their collective share reduced from 28 per cent in 1949 to 23 per cent in 1950 and 22 per cent in 1951. It can be seen in Table 43 that the pull towards the Western Hemisphere and away from the under-developed countries in Asia and Africa affected each of the three commodity groups considered. A similar picture emerges from the figures below, showing index numbers of the volume of metals and engineering products exported from the United States and the United Kingdom to countries in eastern and southern Asia.<sup>1</sup>

	1949 = 100
1950 first half . . . . .	70
1950 second half . . . . .	59
1951 first half . . . . .	63

The total supply of engineering products in western Europe may rise in 1952, partly through fuller utilization of capacity in Italy and some other countries. But this will be largely the result of a co-ordination

<sup>1</sup> The figures refer to countries under the purview of the Economic Commission for Asia and the Far East. They are derived from information given in the *Economic Bulletin for Asia and the Far East*, Vol. 2, No. 2.

of demand for armaments and it is unlikely that more capital equipment will be available for exports to overseas countries, unless the upward trend in domestic private investment is reversed.

Export prices for engineering products have risen only moderately. Table 44 shows indices of unit

Table 44

AVERAGE EXPORT UNIT VALUES FOR  
FINISHED ENGINEERING PRODUCTS

Index numbers—January-September 1949 = 100

Country	In national currency		In U.S. dollars	
	1950 Second quarter	1951 Third quarter	1950 Second quarter	1951 Third quarter
United Kingdom <sup>a</sup> . . . . .	104	116	73	81
Sweden . . . . .	101	119	70	83
France . . . . .	113	127	87	97
Western Germany <sup>b c</sup> . . . . .	83	96	68	80
Italy . . . . .	100	103	90	91
Switzerland . . . . .	102	107	102	107
United States <sup>c</sup> . . . . .	94	108	94	108

NOTE. — The figures are derived from national statistics. They are all based on moving weights.

<sup>a</sup> The figures refer to machinery. An index based on anterior weights and relating to all metal goods, including semi-manufactures, showed 84 (in terms of U.S. dollars) for the third quarter of 1951.

<sup>b</sup> Owing to heavy changes in the commodity composition, the index for western Germany probably exaggerates the price decline between January-September 1949 and the second quarter of 1950.

<sup>c</sup> All finished manufactures.

values for some important European exporters and for the United States. From the second quarter of 1950 to the third quarter of 1951, the increase was 12 per cent for the United Kingdom and 15 per cent for the United States. For Sweden, France and western Germany, the indices of unit value rose by 11 to 18 per cent, while Italian prices remained almost unchanged. As a result, in the third quarter of 1951, export prices of the countries which had devalued strongly were still at a level (measured in terms of dollars) about 20 per cent below the prices prevailing before devaluation and, in spite of rising costs, the larger part of the shift in price relations brought about by devaluation had so far been preserved. Only in the case of France, which devalued to about the same extent as western Germany, has internal inflation been reflected in a considerably greater increase in export prices.

Apart from special cases, it does not seem likely that the relatively low export prices for engineering products reflect a situation where prices are kept low because of strong competition. On the whole, the situation of the European engineering industries in 1951 was undoubtedly one of a shortage of supplies due to lack of capacity or of raw materials,<sup>1</sup> and the very low export prices reflect the fact that prices of finished manufactures tend to follow production costs rather closely in most countries and respond only sluggishly to shifts in demand conditions. Thus, the countries which devalued strongly appear to be carrying a rather heavy burden by maintaining what seem to be abnormally low prices in view of the buoyant demand for engineering products.

#### *The Problem of Textile Markets*

Until recently, the situation as regards overseas exports of textiles—the other broad group of industrial exports from Europe—was not unlike that for metal products. The quantities available for export were easily sold on overseas markets: competition was between importing countries and between home markets and exports rather than between sellers. In the United Kingdom, delivery terms of one year or more continued to prevail for most textile goods until late in 1951.

<sup>1</sup> This generalization, of course, must be qualified for some cases. It was mentioned in Chapter 2 that in some lines a "buyer's market" could be said to exist. Further, the absence of any significant increase in Italian export prices (Table 44) may reflect marketing difficulties for that country, where prices were already high.

The extraordinary demand in the first post-war years, both in Europe and overseas, tended to conceal the effects of the changes in the geographical distribution of textile production. In 1950 and 1951, European exports were further prevented from shrinking by three temporary factors. First, the liberalization of textile trade among European countries provided new outlets, at least for a time; secondly, the effects on production of the earlier world shortage of raw cotton tended to be concentrated in India, Japan and other countries of the Far East and made competition from these countries less severe than it has since become; thirdly, speculative buying for stocking purposes after the outbreak of war in Korea temporarily reversed a weakening tendency in textile markets, which had been apparent in the first half of 1950.

It was mentioned in Chapter 2 that European markets for textiles have recently shown definite signs of renewed weakening. It was also mentioned that the smaller European countries are now able to cover a much larger share of their textile consumption from home production than was the case before the war. The present and prospective position of European textile products in overseas markets remains to be considered.

The relative changes from 1949 to 1951 in textile sales from six European exporting countries to major areas of destination are shown in the table below:

*Percentage Increase or Decrease in the Volume of Textile Exports from Six European Countries<sup>a</sup> to Major Areas of Destination*

*First 9 months of each year*

	Percentage increase			Total Value (Millions of current dollars) Jan.-Sept. 1951 at annual rate
	1949 to 1950	1950 to 1951	1949 to 1951	
Area of destination:				
Western Europe . .	57	9	71	1,526
Eastern Europe . .	—	-18	-18	36
United States and Canada . . . .	36	13	53	347
Other overseas countries . . . .	-16	21	2	1,721
Total . . . .	10	15	26	3,630

Source: The percentages are derived from Table XXVI in Appendix A.  
<sup>a</sup> United Kingdom, western Germany, France, Belgium-Luxembourg, Italy, Switzerland.

It appears that the fall from 1949 to 1950 in textile exports to overseas countries (outside North America) was no more than just offset by the subsequent

increase from 1950 to 1951. Over the two-year period from 1949 to 1951, exports to these countries increased by only 2 per cent, while textile trade among western European countries increased by about 70 per cent. This shift can be expressed in a slightly different way: while overseas markets in 1949 accounted for 61 per cent of total textile exports from the countries here considered, this percentage amounted in the first nine months of 1951 to only 50. In view of the present situation on European textile markets, it is not to be expected that intra-European trade in textiles can be maintained at the high level of the first nine months of 1951. If it were assumed—by way of illustration—that intra-European trade in textiles were to decrease by half of the amount gained since 1949, the maintenance of an over-all unchanged volume of exports would require an increase in sales to overseas countries by some \$300 million, or about 15 per cent, over the 1951 level.

In order to gain an impression of future prospects for European sales of textiles on overseas markets it is necessary to bring the major non-European exporting countries—namely, the United States, India and Japan—into the picture. The figures below show the percentage distribution among nine major exporting countries of their total sales of textiles to markets outside Europe, the United States and Canada, as well as the change in the total volume of these exports:

	First 9 months of each year				
Percentage distribution :	1949	1950	1951		
United Kingdom . . . . .	37	32	30		
France . . . . .	13	15	15		
Belgium-Luxembourg, Italy, western Germany and Switzerland	13	9	11		
United States . . . . .	19	14	15 <i>a</i>		
India . . . . .	11	19	15 <i>b</i>		
Japan . . . . .	7	11	14 <i>b</i>		
Total . . . . .	100	100	100		
Total volume (1949 = 100) :					
Above	{	incl. India and Japan	100	93	113
countries		excl. India and Japan	100	80	100

Source: The figures are derived from Table XXVI in Appendix A and from Indian trade statistics.

<sup>a</sup> Based on the first 8 months of the year.

<sup>b</sup> Based on the first 6 months of the year.

Total exports of these nine countries together can, for practical purposes, be regarded as representative of world trade in textiles. It appears, then, that, during the last two years, overseas markets (outside North America) have not absorbed greatly increased quantities of textiles. The increase from 1949 to 1951

comes to 14 per cent, which is less than the increase in production in the main producing countries. In fact, the increase in total sales has not been more than just enough to make room for the increase in exports from India and Japan without an actual decrease in the volume of exports from Europe and the United States. As a result, the share of the United Kingdom in the total exports of the nine countries here considered has declined from 37 per cent in 1949 to 30 per cent in 1951. On the other hand, French exports to overseas have increased, both absolutely and relatively, but this is mainly due to increased exports to overseas countries of the French Union.

For two important categories of textiles, cotton cloth and cloth of artificial fibres, more detailed information is given in Tables 45 and 46. The tables cover a very large proportion of world exports of these commodities.<sup>1</sup> It will be noted that, for both cotton and artificial cloth, British and American sales are highly concentrated in neighbouring or politically affiliated areas. Out of the exports of the United Kingdom to overseas countries other than North America, more than 80 per cent went to countries within the British Commonwealth. Likewise, more than 90 per cent of total French exports of cotton cloth (not shown in the table) are sold to countries within the French Union. United States exports of cotton cloth are highly concentrated in the Canadian, Latin American and Philippine markets, but Indonesia and the Union of South Africa have also come to play an important role. Western Germany's and Italy's exports are more evenly spread over a number of markets. Dutch exports of cotton cloth to Indonesia are important in relation to total exports from the Netherlands, but they make up only a small and declining part of total imports of cotton goods to Indonesia. Exports from India have been directed mainly towards neighbouring areas, such as Malaya, Iran, Ceylon and Burma. For Japan, on the other hand, which is at present largely cut off from trade with neighbouring countries on the Asiatic mainland, the most important individual markets have been Pakistan and Indonesia for cotton cloth and the Union of South Africa for artificial cloth. It can further be seen from the table that a few overseas markets play a predominant role as importers of cotton and artificial cloth. Out of the total quantity of cotton cloth covered by the table, 566,000 tons for 1951, no less than

<sup>1</sup> France is the only major exporting country which cannot be included in this analysis.

Table 45  
EXPORTS OF COTTON CLOTH FROM MAJOR  
Thousands of  
12 months of 1949 and 1950 and  
EXP  
tons  
6 to

Exporting country Country or area of destination	United Kingdom			Western Germany			Italy <sup>a</sup>			Netherlands			Total of four European countries		
	1949	1950	1951 <sup>b</sup>	1949	1950	1951 <sup>b</sup>	1949	1950	1951 <sup>b</sup>	1949	1950	1951 <sup>b</sup>	1949	1950	1951
Australia and New Zealand .	19.4	18.0	22.4	0.2	0.1	0.6	0.9	1.7	3.0	0.5	0.2	0.6	21.0	20.0	26.6
Union of South Africa . . .	8.6	9.1	14.7	0.1	0.2	0.5	0.3	0.9	2.0	0.1	0.3	1.0	9.1	10.5	18.2
India . . . . .	5.9	0.7	0.9	—	—	—	0.7	0.1	0.1	0.1	—	—	6.7	0.8	1.0
Pakistan . . . . .	7.1	7.4	5.2	—	—	0.1	0.9	0.8	0.8	0.1	0.1	0.1	8.1	8.3	6.2
Malaya . . . . .	3.8	4.0	5.9	0.1	0.1	0.2	0.9	0.7	1.5	0.2	0.1	0.2	5.0	4.9	7.8
Gold Coast and Nigeria . .	18.8	13.6	12.1	4.9	0.9	1.1	1.2	0.4	0.7	0.3	—	..	25.2	14.9	13.9
Other selected sterling area countries <sup>c</sup> . . . . .	8.1	6.8	6.5	0.1	0.1	0.3	1.3	1.3	2.3	0.2	0.1	0.2	9.7	8.3	9.3
Indonesia . . . . .	1.0	0.4	1.0	1.0	0.2	0.2	0.2	0.3	..	6.7	5.9	5.5	8.9	6.8	(6.7)
Thailand . . . . .	..	..	..	—	—	—	..	..	..	0.2	0.1	0.1	0.2	0.1	0.1
Selected Middle East countries <sup>d</sup>	1.9	1.8	1.8	0.8	0.2	0.4	6.5	5.6	3.7	0.1	0.1	—	9.3	7.7	5.9
Selected Latin American countries <sup>e</sup> . . . . .	2.1	1.2	0.9	—	0.2	0.4	2.1	1.0	0.7	—	0.2	0.1	4.2	2.6	2.1
Other overseas countries <sup>f</sup> . .	14.3	12.7	13.3	0.9	1.2	1.6	2.4	2.9	5.9	2.2	2.9	3.4	19.8	19.7	24.2
Total overseas countries <sup>f</sup> . .	91.0	75.7	84.7	8.1	3.2	5.4	17.4	15.7	20.7	10.7	10.0	11.2	127.2	104.6	122.0
United States and Canada . .	3.4	3.6	3.3	0.1	0.2	0.3	0.3	0.7	1.2	0.1	0.2	0.3	3.9	4.7	5.1
Europe . . . . .	9.2	11.4	12.8	11.1	10.1	17.1	11.4	27.3	25.3	3.8	4.5	4.8	35.5	53.3	60.0
Total World . . . . .	103.6	90.7	100.8	19.3	13.5	22.8	29.1	43.7	47.2	14.6	14.7	16.3	166.6	162.6	187.1

NOTE. — Estimates have been made when detailed data were not available, and in some cases conversion factors were applied when only values or quantities expressed in yards or square yards were given. See "Notes to the Statistics".

<sup>a</sup> Figures for Italy relate to all cotton manufactures.

<sup>b</sup> 1951 figures are based on the following number of months at annual rates: United Kingdom, 9 months; western Germany and the Netherlands, 8 months; Italy, the United States and India, 7 months; Japan, 6 months, 9 months for 1950 and 10 months for 1949.

Table 46  
EXPORTS OF CLOTH OF ARTIFICIAL FIBRE FROM MAJOR EXPORTING COUNTRIES BY MAIN DESTINATIONS

Thousands of tons  
12 months of 1949 and 1950 and first 6 to 9 months of 1951 at annual rates

Exporting country Country or area of destination	United Kingdom			Western Germany and Italy			United States			Japan			Total of listed countries		
	1949	1950	1951	1949	1950	1951 <sup>a</sup>	1949	1950	1951 <sup>b</sup>	1949 <sup>c</sup>	1950 <sup>d</sup>	1951 <sup>e</sup>	1949	1950	1951
Australia and New Zealand .	7.3	9.1	9.3	0.7	1.2	2.7	2.2	2.5	1.6	0.1	0.4	0.7	10.3	13.2	14.3
Union of South Africa and Southern Rhodesia . . . .	3.2	4.0	7.1	0.7	3.6	6.9	4.0	1.8	5.1	—	4.0	5.1	7.9	13.4	24.2
India, Pakistan and Ceylon .	1.5	0.7	0.4	0.6	0.4	0.8	0.1	0.1	0.2	0.2	0.1	2.6	2.4	1.3	4.0
Malaya . . . . .	0.1	0.1	0.7	1.7	3.0	2.6	0.4	0.2	1.2	0.2	1.6	1.8	2.4	4.9	6.3
British East Africa . . . . .	0.1	0.1	0.7	0.5	0.5	1.3	—	—	..	0.1	0.3	2.0	0.7	0.9	4.0
Gold Coast and Nigeria . .	1.3	2.0	2.5	0.8	1.0	2.2	..	..	..	0.3	0.7	0.6	2.4	3.7	5.3
Total of above countries . .	13.5	16.0	20.7	5.0	9.7	16.5	6.7	4.6	8.1	0.9	7.1	12.8	26.1	37.4	58.1
Other overseas countries . .	4.5	5.1	4.7	5.6	8.0	7.0	29.4 <sup>f</sup>	22.3 <sup>f</sup>	22.5 <sup>f</sup>	1.7	8.3	9.9	41.2	43.7	44.1
Europe . . . . .	2.0	2.2	2.1	5.8	6.8	14.8	2.3	1.6	1.6	0.4	2.1	1.0	10.5	12.7	19.5
Total . . . . .	20.0	23.3	27.5	16.4	24.5	38.3	38.4	28.5	32.2	3.0	17.5	23.7	77.8	93.8	121.7

NOTE. — For a definition of the products and the sources used, see "Notes to the Statistics".

<sup>a</sup> Based on 8 months for Western Germany and 7 months for Italy.

<sup>b</sup> Based on 8 months.

<sup>c</sup> Based on 10 months.

<sup>d</sup> Based on 9 months.

<sup>e</sup> Based on 6 months.

<sup>f</sup> Of which to Latin American countries 1949: 13.5; 1950: 15.1; 1951: 12.5, and to the Philippines 1949: 9.7; 1950: 2.7; 1951: 2.4.



## EXPORTING COUNTRIES BY MAIN DESTINATIONS

tons  
6 to 9 months of 1951 at annual rates

	United States			India			Japan			Total of countries listed			Exporting country
	1949	1950	1951 <sup>b</sup>	1949	1950	1951 <sup>b</sup>	1949 <sup>b</sup>	1950 <sup>b</sup>	1951 <sup>b</sup>	1949	1950	1951	Country or area of destination
	1.2	0.5	2.1	4.6	6.0	5.9	1.4	1.0	5.3	28.2	27.5	39.9	Australia and New Zealand
	9.0	2.6	10.1	..	..	..	0.6	5.1	4.1	18.7	18.2	32.4	Union of South Africa
	0.1	0.2	0.3	—	—	—	3.7	—	—	10.5	1.0	1.3	India
	1.9	0.6	0.1	4.3	5.7	—	3.8	16.6	25.2	18.1	31.2	31.5	Pakistan
	1.6	0.4	2.4	7.3	27.7	32.7	..	2.6	5.6	13.9	35.6	48.5	Malaya
	—	—	—	2.5	3.2	1.9	8.7	3.6	2.4	36.4	21.7	18.2	Gold Coast and Nigeria
	2.9	—	2.3	13.6	30.4	13.8	6.8	6.3	4.9	33.0	45.0	30.3	Other selected sterling area countries <sup>c</sup>
	5.5	10.0	19.3	..	..	..	5.6	28.1	30.4	20.0	44.9	56.4	Indonesia
	3.1	2.2	2.9	..	..	..	4.1	9.8	5.8	7.4	12.1	8.8	Thailand
	14.4	2.9	4.9	8.4	20.1	15.0	1.0	1.2	3.4	33.1	31.9	29.2	Selected Middle East countries <sup>d</sup>
	38.0	40.4	36.1	..	..	..	0.4	1.1	1.0	42.6	44.1	39.2	Selected Latin American countries <sup>e</sup>
	40.4 <sup>g</sup>	19.2 <sup>g</sup>	29.6 <sup>g</sup>	11.5	25.5	35.7	19.6	15.6	13.8	91.3	80.0	103.3	Other overseas countries <sup>f</sup>
	118.1	79.0	110.1	52.2	118.6	105.0	55.7	91.0	101.9	353.2	393.2	439.0	Total overseas countries <sup>f</sup>
	17.4	15.8	19.5	—	0.2	4.5	5.0	5.5	0.3	26.3	26.2	29.4	United States and Canada
	8.7	4.0	7.3	0.7	8.2	13.6	25.0	22.4	16.4	69.9	87.9	97.3	Europe
	144.2	98.8	136.9	52.9	127.0	123.1	85.7	118.9	118.6	449.4	507.3	565.7	Total World

<sup>c</sup> British East Africa, Burma, Ceylon and Southern Rhodesia. (Iraq, although a sterling area country, is included under "Selected Middle East countries".)

<sup>d</sup> Egypt, Iran, Iraq, Lebanon and Syria. For India: Arabia, Aden and dependencies, Bahrain Islands, Iran and Iraq.

<sup>e</sup> For the United Kingdom, only Argentina, Uruguay and Venezuela.

<sup>f</sup> Excluding the United States and Canada.

<sup>g</sup> Of which to the Philippines 1949: 20.0; 1950: 10.4 and 1951: 14.9.

210,000 tons, or nearly 40 per cent, were accounted for by five countries: Australia, the Union of South Africa, Pakistan, Indonesia and Malaya.<sup>1</sup>

With the growing competitiveness of textile markets, the problem of relative prices of different exporting countries has become more important. In the field of textile manufactures, where variations of design and quality are endless, it is of course extremely difficult to establish hard-and-fast facts about relative prices. Nevertheless, an attempt has been made to compare both the level and the recent movement of export prices for certain groups of cotton and artificial textiles on the basis of average unit values derived from export statistics. In Table XXIV of Appendix A, the results are shown for nine exporting countries and eight different categories of textile goods. In Table 47 the results are shown for printed cotton cloth

<sup>1</sup> The totals given for each importing country or area in the last three columns of the tables can, of course, be taken as indicating only very roughly the order of magnitude of imports by that particular country, both because the tables do not cover all exporting countries and because they are constructed on the basis of statistics of the exporting countries. In particular, it is known that a large part of the textiles exported to Malaya is re-exported to other countries in South-East Asia.

only. The average export prices for the three periods covered have all been expressed as a percentage of the United States export prices in the first nine months of 1949.

Table 47

## COMPARATIVE LEVELS AND MOVEMENTS OF EXPORT UNIT VALUES (IN TERMS OF DOLLARS) FOR PRINTED COTTON CLOTH

Averages for first 9 months of each year

Index numbers based on dollar equivalent (United States export unit value January-September 1949 = 100)

Country	1949	1950	1951
United States . . . . .	100	98	132
Belgium . . . . .	151	123	163
France . . . . .	171	137	155
Western Germany . .	134	112	152
Italy . . . . .	156	117	154
Netherlands . . . . .	195	134	157
United Kingdom . . .	178	124	153
Japan <sup>a</sup> . . . . .	90	78	124 <sup>b</sup>

Sources: See "Notes to the Statistics".

<sup>a</sup> Cotton cloth other than grey.

<sup>b</sup> Based on first 6 months of the year.

The first thing to note is that export prices in 1949 varied widely from one country to another and that for all European exporters the prices appeared to be considerably higher than the corresponding United States price. In 1950, the prices of Italian and Belgian cloth declined, in sympathy with the drop in dollar prices for exports from countries whose currencies had been more sharply devalued. Later, the export prices of these and other countries rose again, and in 1951 a remarkably uniform level of prices for all European exporters appears to have been reached. It would seem that the liberalization of European trade has made it less easy for a country to quote particularly high prices, but that, on the other hand, the increased demand following Korea made it possible for the exporters (Italy, Belgium, western Germany), which had previously found it necessary to cut their prices, to bring them in line with other countries' export prices.

It would appear that, in 1951, European export prices for printed cloth were at a level some 15 per cent above the United States price. This may not be more than can be explained by differences in quality.<sup>1</sup> In Table 48, a closer comparison is made

<sup>1</sup> Care has been taken to choose as narrowly defined types of goods as possible for this price comparison. However, in foreign trade statistics, the specification is mainly by the degree and nature of manufacturing (whether printed, dyed, etc.) and it is not possible to take account of other important differences in quality.

between United States and United Kingdom export prices for eight commodities. By 1951, American export prices for cotton cloth had risen by some 30 per cent above their 1949 level. For artificial yarn and cloth the increase was much smaller. The dollar equivalent of British export prices at the same time remained well below that of 1949 before devaluation. As a result, the difference between United States and United Kingdom prices had come down to something like 10 to 20 per cent, which, as already stated, is no more than may be explained by differences in quality. The fact that prices for the high-quality cloth made of coloured yarns show a particularly great difference would seem to confirm this. The improvement in the relation of the United Kingdom price to that charged by the United States is brought out more clearly in the figures below. If the ratio of the British to the United States prices in the first nine months of 1949 is taken as 1.00, the ratio in the first nine months of 1950 and 1951 is as follows :

	1950	1951
<i>Cotton cloth :</i>		
Grey, unbleached . . . . .	0.72	0.79
White, bleached . . . . .	0.70	0.66
Printed . . . . .	0.71	0.67
Dyed in the piece . . . . .	0.75	0.70
Coloured . . . . .	0.71	0.66
<i>Artificial silk yarn . . . . .</i>	0.78	0.87
<i>Artificial silk cloth :</i>		
Printed . . . . .	0.74	0.71
Dyed . . . . .	0.74	0.69

**Table 48**  
**COMPARATIVE LEVELS AND MOVEMENTS OF UNITED KINGDOM AND UNITED STATES EXPORT**  
**UNIT VALUES (IN TERMS OF DOLLARS) FOR SELECTED TEXTILES**  
*First 9 months of each year*

	<i>Index numbers — United States unit value January-September 1949 = 100</i>					
	United States			United Kingdom		
	1949	1950	1951	1949	1950	1951
<i>Cotton cloth :</i>						
Grey, unbleached . . . . .	100	106	133	202	155	212
White, bleached . . . . .	100	107	136	137	103	123
Printed . . . . .	100	98	129	178	124	153
Dyed in the piece . . . . .	100	98	129	156	114	140
Coloured . . . . .	100	96	127	196	134	165
<i>Artificial silk yarn . . . . .</i>	100	96	110	139	104	133
<i>Artificial silk cloth :</i>						
Printed . . . . .	100	99	112	180	131	143
Dyed . . . . .	100	93	109	174	119	131

Sources : See "Notes to the Statistics".

The column for 1950 shows the effects of devaluation which reduced the dollar equivalent of British prices by 30 per cent. Since then, however, the British prices have further cheapened in relation to American prices (i.e., British prices have risen less than American), so that the ratio declined further to around 0.65. There are two important exceptions to this—namely, grey cotton cloth and artificial silk yarn. Both are commodities where the raw material cost weighs particularly heavily, and in both cases the prices paid by American manufacturers for the raw materials (raw cotton and pulp) have risen much less than the prices paid by British manufacturers.<sup>1</sup>

It may be tentatively concluded, first, that very marked differences did not exist between export prices for textiles from different European countries, and secondly, that the price advantage of American over European textiles, if any, is not very great. A considerable price differential would develop only if present differences in the raw material costs of European and American producers were to continue. For the question of future trends in European textile markets overseas, however, a consideration of relative textile prices is probably less relevant. In this respect, the crucial question seems to be to what extent the difficulties which have hitherto prevented the expansion of textile production overseas can be expected to be overcome in the near future.

#### *Trends in Overseas Markets for Textiles*

In spite of the fact that, in 1951, Europe's textile exports to overseas markets were barely higher than in 1949, it seems that even this level of exports was maintained only by virtue of the speculative buying wave which followed the outbreak of war in Korea. In the course of the year, reports became current of over-stocking in Asian and African markets. In Burma, for instance, it was estimated that the stock of textiles would be sufficient for more than one year's consumption, and in Malaya, also, very large stocks of textiles were reported to have been accumulated.<sup>2</sup> In European exporting countries, a sharp reduction of the intake of orders was reported towards the close of the year, and delivery terms for British textiles shortened considerably.

<sup>1</sup> See Table 4.

<sup>2</sup> See *Economic Bulletin for Asia and the Far East*, Economic Commission for Asia and the Far East, Vol. 2, No. 2.

The recent sharp decline in sales of textiles is undoubtedly partly of a speculative nature, reflecting the desire of buyers to await the effects of lower raw material prices, but it is equally certain—and more important—that the development of home production of textiles, which is inscribed in the economic plans of most overseas countries, is increasingly being realized, particularly in the Asiatic countries, where textile production in recent years has suffered from a persistent shortage of raw cotton and yarn.<sup>3</sup> Although this trend towards the development of textile production is apparent in all overseas areas,<sup>4</sup> developments in India and Japan are of singular importance.

#### *Textile Production in India and Japan*

Outside Europe and North America, by far the largest producers of textiles are Japan, China and India. Among these, Japan traditionally played an important role in world exports of textiles, including cotton goods as well as artificial silk and natural silk. While production in China was and is mainly for the home market, India, in spite of its huge cotton manufacturing industry, used to be a big net importer of

<sup>3</sup> For instance, a report on the economic situation in Asia and the Far East mentions the following facts, all relating to the second quarter of 1951: In Burma and Ceylon, the supply situation for cotton yarn improved. In Burma, a cotton spinning and weaving factory was opened which would cover 10 per cent of the country's requirements of cotton yarn and 7 per cent of requirements of grey cloth. In Ceylon, plans for a state-owned textile factory were drawn up. In Pakistan, the Government approved the establishment of seven new textile mills. In Taiwan, a new mill started operations. (See *Economic Bulletin for Asia and the Far East*, Economic Commission for Asia and the Far East, Vol. 2, No. 2.)

<sup>4</sup> Although on a much smaller scale than in the large textile-producing countries in Asia, the more industrialized countries in Latin America have also substantially increased production and reduced imports of cotton textiles, and some of them have emerged as exporters to other countries within the region. The table below shows production and net imports of cotton cloth in Brazil, Chile and Mexico for 1938 and the most recent post-war year for which figures are readily available.

	Production		Net imports	
	1938	1949	1938	1949
Brazil . . . . .	113.7	142.1	0.3	—3.8
Chile . . . . .	6.8	15.6	5.8 <sup>a</sup>	1.1 <sup>a</sup>
Mexico . . . . .	42.2	51.6 <sup>b</sup>	1.2	—4.1 <sup>b</sup>

<sup>a</sup> Imports only.  
<sup>b</sup> 1948.

For Argentina, no comparable data are available. It is known, however, that the share of imports in total consumption of cotton textiles declined from 74 per cent in 1935 to 14 per cent in 1945. By 1950, total demand for textiles is reported to have been met from domestic production except for some fine fabrics. (See *Economic Survey of Latin America in 1949*, Economic Commission for Latin America, pages 176 and 367, and country annexes to that study for Brazil (page 190) and for Mexico (page 146).)

cotton goods. Since the war, India, too, has emerged as one of the major exporters (Table 45). The table below shows rough estimates of India's and Pakistan's combined supply balance for cotton cloth in 1938 and 1950 :

	Thousand tons	
	1938	1950
Production <sup>a</sup> . . . . .	490	525
Imports <sup>b</sup> . . . . .	75	25
Exports <sup>b</sup> . . . . .	20	120
Apparent consumption <sup>a</sup> . . . . .	545	430

Sources : Production : the figures have been estimated on the basis of information given in *Economic Survey of Asia and the Far East 1950*, Economic Commission for Asia and the Far East, page 249.

Imports and exports : *ibid.*, page 404, and Table 45 in this SURVEY.

<sup>a</sup> Including only mill-made goods. Hand-loom production, in India alone, is estimated to be of the order of 200,000 tons.

<sup>b</sup> Excluding trade between India and Pakistan.

The reversal of the position of the combined area of India and Pakistan from a net importer to a big exporter of cotton cloth is the net result of a very small increase in production as compared with pre-war levels and a substantial decline in home consumption. In India (not including Pakistan) production of cotton goods reached the 1938 level in 1948, but over the two following years it declined by about 15 per cent, mainly due to difficulties in the supply of raw materials. Nevertheless, in 1949, India had to relax restrictions on exports of cotton goods in order to relieve its balance-of-payments difficulties.

The prospects for India's exports of textiles are not clear. According to the Five-year Plan of the Indian Government,<sup>1</sup> production of cotton cloth would have to reach by 1955/56 a level some 25 per cent above 1950. It is estimated that this increase in output would be possible without any addition to the now existing capacity. At the same time, the Five-year Plan implies a reduction of exports to little more than half of what they were in 1950, whereby *per capita* consumption would very nearly regain its pre-war level. Needless to say, the fulfilment of this target, especially as regards the curtailment of exports, presupposes a rather favourable development of India's external trade position in general.

Two main factors, on the supply and demand side, respectively, helped to bring about a substantial increase in Japan's textile production and exports in 1950 : a considerable easing of the supply of raw materials, and the sudden increase in foreign demand

after the outbreak of war in Korea. It can be seen from the table below that, while industrial production as a whole reached 80 per cent of the pre-war level in 1949, the index for textiles remained as low as 26. Since then, textile production has doubled, but it still remains at an extremely low level compared with other branches of industry. Exports of textiles from Japan also doubled from 1949 to the first half of 1951. Although, as has been shown, Japanese textiles at that time were already an important factor in the world markets, the volume was no more than a third of what it was in the years 1934-1936.

#### Industrial Production and Exports of Japan

	Pre-war <sup>a</sup>	1949	1950 1st half	1950 2nd half	1951 1st half <sup>b</sup>
Volume of industrial production :					
Total . . . . .	100	80 <sup>c</sup>	86	104	123
Textiles . . . . .	100	26 <sup>c</sup>	33	45	50
Volume of exports :					
Total . . . . .	100	15	24	33	33
Textiles . . . . .	100	17	25	32	31
Country distribution of exports (percentages) :					
Neighbouring area <sup>d</sup> . . . . .	44	11	16		14
South-East Asia <sup>e</sup> . . . . .	17	35	28		35
All other destinations . . . . .	39	54	56		51

Sources : *Economic Survey of Japan (1950-51)*, Economic Stabilization Board, Japanese Government, pages 39, 192, 194, 220 ff.

*Economic Bulletin for Asia and the Far East*, Economic Commission for Asia and the Far East, Vol. 2, No. 2.

<sup>a</sup> Average 1932-1936 for production, average 1934-1936 for exports.

<sup>b</sup> January-April for industrial production, January-May for volume of exports; January-March for country distribution of exports.

<sup>c</sup> Fiscal year April 1949-March 1950.

<sup>d</sup> China, Manchuria, Kwantung, Taiwan, Korea, Sakhalin and Hong Kong.

<sup>e</sup> Indo-China, Thailand, Malaya, Singapore, Philippines, British Borneo, Indonesia, Burma, Pakistan and Ceylon.

Since the limitation on the number of spindles previously in force was removed in the summer of 1950, the expansion of textile production in Japan is likely to continue, although at a reduced rate. Marketing difficulties would probably be less of an obstacle to Japanese than to European exporters. The recent behaviour of Japanese export prices suggests that they are not closely connected with costs and are highly responsive, upwards and downwards, to changes in market conditions : during the first nine months after Korea, export prices rose sharply; for cotton fabrics, for instance, a peak was reached in March 1951 some 90 per cent above the pre-Korean level. At that time, Japanese exporters encountered some price

<sup>1</sup> *The First Five-year Plan, a Draft Outline*, Government of India, Planning Commission, New Delhi, 1951, page 153.



resistance in foreign markets and export orders were cancelled. The Japanese industry was, however, able to react to these difficulties by cutting prices considerably. By June 1951, export prices for cotton fabrics had declined by some 20 per cent. In the same period, the prices of European exports were climbing month by month as the higher level of costs worked itself through.<sup>1</sup>

The problems involved in the reappearance of Japan on the world market are rendered more difficult by the political conflict in the Far East. It can be seen from the table above that, since the war, a remarkable shift has taken place in the country distribution of

<sup>1</sup> The impression of a rather favourable competitive position of the Japanese textile industry is confirmed by the official calculation relating to profits; the ratio of profits to total capital employed amounted in the second half of 1950 to 40 per cent for cotton-spinning and 92 per cent for the production of chemical fibre. For nine other manufacturing industries specified, the arithmetic average of the ratios of profits was about 10 per cent. These rates of profits, although calculated on total capital employed, are somewhat inflated by the fact that the revaluation of fixed capital assets to correspond to the post-war price level has not been completed. This, however, does not invalidate the general conclusion that the level of profits in Japan's textile industry was extremely high. (See *Economic Survey of Japan* (1950-51), Economic Stabilization Board, Japanese Government, page 116.)

Japan's exports. Sales to the neighbouring area have declined sharply and Japan has had to seek its markets in South-East Asia, Africa, and other overseas countries. In a period when the market situation for textiles is in any case difficult, there is a danger that the cutting-off of Japan from its natural markets and its attempts to find alternative outlets will lead to the application of discriminatory practices in commercial policy.<sup>2</sup>

<sup>2</sup> Recent indications that this danger is a real one are not lacking. For instance, it was reported that in order to relieve the difficulties of the French cotton industry "the Government, although not wanting to return to an excessive protectionism, will limit the imports of foreign products in the overseas countries of the French Union . . . Already, the import of Japanese cloth in Indochina has been forbidden." (*Le Monde*, 16 January 1952.) In an address recently delivered by Sir Thomas Barlow, the Chairman of the District Bank, the problem of Japanese competition, as seen from the point of view of the Lancashire industry, was stated in these words: "The big issue now is whether Japan on her own accord will decide to act with due regard to the interests of other countries whose economies compel them to depend heavily on the export of cotton goods, or whether she may force these other countries to protect themselves, as they did in pre-war days, by tariffs and quotas." (*The Times*, 15 January 1952.) In Southern Rhodesia, in connection with the recent general tightening of import restrictions, imports from Japan were completely forbidden, with the exception of cement and steel. (*Neue Zürcher Zeitung*, 27 January 1952.)

## Chapter 4

### THE STRUGGLE TO CONTAIN INFLATION

#### 1. THE FORCES OF INFLATION

##### *The Outlook at the Beginning of 1951*

It was only too likely at the end of 1950 that the next year would be one of continued inflation in Europe. In the previous eighteen months there had been, successively, an upturn of demand in the United States, a series of currency devaluations which raised several countries' import prices in terms of their national currencies and diverted goods from home markets,<sup>1</sup> and, after the outbreak of fighting in Korea, a feverish rush by Governments and business-men everywhere to buy scarce materials, at almost any cost, both for current use in greatly expanded armament programmes and for stocking against the risk of early and widespread war. The rises in the prices of internationally traded materials which this combination of events produced had, by the end of 1950, only begun to work themselves through the chain of internal costs and prices in most countries, and it was clear that, even should these rises come to an end, a considerable increase in the prices of manufactured goods could hardly be avoided. This increase would not be restricted to products with a high import content, but would inevitably be transmitted to goods competing with them, to wages and so, in the end, generally diffused.<sup>2</sup>

All trading countries were susceptible to inflation from the rise in international markets, although the pressure for upward revision of wages was inevitably weaker in those which had heavy unemployment or where the bargaining position of organized labour was weak for other reasons. Countries such as the United Kingdom, where a large import of raw materials and essential consumer goods was combined

with a high level of employment, were particularly vulnerable.

In Finland and Sweden, the position was further aggravated by the rapid rise in world demand for forest products, which created abnormal profits in their export industries, intensified the general atmosphere of inflation and induced demands for wage increases. No country where resources had been nearly fully utilized at the end of 1950—so that large increases in production in 1951 were ruled out—could have escaped the risk of further inflation even had it been content to maintain more or less unchanged the existing amount of resources devoted to domestic consumption and investment. Other countries, however—notably western Germany, Belgium and Italy—were able to contain inflationary pressure because, owing to the low level at which they had previously been utilizing their existing capital resources, they were able to achieve very substantial increases in output per man.<sup>3</sup>

##### *International Price Movements in 1951 and Their Effect on Real Income*

As has already been mentioned in Chapter 1, the pressure from outside grew in strength for some months. As the turn in the international markets did not come until about the end of the first quarter, indices of the unit value of imports (shown in Table 49), that is, of the effective cost of the imports actually landed, were higher in the second than in the first quarter, but thereafter the movement slowed down and was even reversed. Whereas in the twelve months immediately after the 1949 devaluation it was only in the devaluing countries that import costs rose, from then onwards the upward movement affected all countries. The countries whose cost structures were most affected (because of the high import content

<sup>1</sup> Belgium, Italy and Switzerland—countries which did not devalue or devalued little—benefited, of course, from the reduced cost of their substantial imports from other European countries.

<sup>2</sup> See the 1950 SURVEY, page 133.

<sup>3</sup> See Chapter 2, page 22.

**Table 49**  
**UNIT VALUES OF IMPORTS AND EXPORTS, AND WHOLESALE PRICES**  
*Percentage changes*

Country	IMPORTS				EXPORTS				WHOLESALE PRICES			
	July-Sept. 1949 to July-Sept. 1950	July-Sept. 1950 to Jan.-Mar. 1951	Jan.-Mar. 1951 to April-June 1951	April-June 1951 to July-Sept. 1951	July-Sept. 1949 to July-Sept. 1950	July-Sept. 1950 to Jan.-Mar. 1951	Jan.-Mar. 1951 to April-June 1951	April-June 1951 to July-Sept. 1951	Sept. 1949 to Sept. 1950	Sept. 1950 to Mar. 1951	Mar. 1951 to June 1951	June 1951 to Sept. 1951
Austria <sup>a</sup>	61	39	4	0	46	43	11	13	31	19	8	9
Belgium	5	20	5	-1	25	-10	24	7	16	15	-1	-2
Denmark	17	7	18	5	33	-4	7	1	17	20	8	-4
Finland	27	22	14	3	44	17	65	17	18	28	7	5
France	9	21	11	1	35	-1	9	8	9	20	3	0
Western Germany	16	18	10	5	38	-5	9	9	2	18	2	0
Greece	..	..	..	..	..	..	..	..	5	20	2	-1
Ireland	..	..	..	..	..	..	..	..	7	13	3	1
Italy	-7	22	13	0	37	-4	10	4	4	12	-2	-3
Netherlands	16	14	9	1	26	2	18	7	16	20	1	-2
Norway	20	11	11	3	27	12	14	15	20	10	9	0
Portugal	-6	..	..	..	..	1	..	..	-4	12	-1	1
Spain	..	..	..	..	..	..	..	..	22	22	+1	0
Sweden	15	15	12	5	34	9	30	20	6	26	6	0
Switzerland	-11	16	8	2	27	-7	6	3	3	11	-2	-2
Turkey	-16	12	16	..	..	-15	58	-22	-12	19	-8	-3
United Kingdom	22	24	13	-1	39	7	9	8	18	15	2	1

Sources: See "Notes to the Statistics". NOTE: - For import and export prices, current weights except for Finland, Italy, Sweden, Switzerland and the United Kingdom. <sup>a</sup> Imports exclude shipments under E.R.P.

of their products and a relatively high concentration in their imports of those goods whose prices had risen most) appear to have been the Netherlands, Norway and the United Kingdom.

The export prices of most countries increased more slowly at first, but the rise went on throughout the year. To the extent that export prices merely reflect domestic costs, this was a symptom rather than a primary cause of inflation. The greatest increases, however, occurred in Belgium, Finland, Norway and Sweden,<sup>1</sup> where the initial cause was a rise in external demand for the products mainly exported.

The net result of these movements was an improvement in the Finnish and Swedish terms of trade in merchandise of more than 20 per cent, an improvement of 10 per cent in the case of Belgium and Norway and a significant deterioration, getting somewhat less as the year wore on but of the order of 10 to 14 per cent in the twelve months ended in September 1951, in the terms of trade in merchandise of the other western European countries. (In the case of those countries with shipping fleets, it was in part offset by increases in shipping freights, from which Norway also greatly benefited.)

A decline in a country's terms of trade, by reducing the amount of imported goods and services which a given volume of exports will buy, reduces that country's real income and thus is inflationary in its effects. In Table 50 an attempt is made, in the absence of official data for 1951, to estimate roughly the extent of the changes in real income brought about by changes in the ratio of export to import prices. It seems that the loss in the United Kingdom and the Netherlands in 1951 was equivalent to about 2½ to 3 per cent and in Denmark and Ireland to as much as from 3½ to 4 per cent of the gross national product of 1950. All these countries had already experienced similar, though smaller, losses in the course of 1950 as a result primarily of the devaluation of their currencies. Finland, Norway and Sweden, on the other hand, with gains equivalent to 4 or 5 per cent of the national product, more than recovered in 1951 the losses they had suffered in 1950.

<sup>1</sup> Austrian export prices also increased very substantially partly because Austria exports timber, but mainly because manufactured prices rose a symptom of rapid internal inflation.

### *Internal Inflationary Forces*

In full employment conditions, inflation is likely to occur even if there is no pressure from without when there is a strong desire on the part of any organized group, whether wage-earners, farmers, business-men or Government, to increase its share of the national income or the national expenditure. Both desires were present in most countries in 1951, thus adding to the external inflationary forces just described.

In countries such as Sweden, bargains had earlier been struck with wage-earners and farmers by which their money incomes were more or less stabilized for a certain period which was now coming to an end. In the United Kingdom, a hand-to-mouth policy of moral suasion toward the trade unions had been followed by the Government, which had already broken down by the end of 1950 under the shock of the first post-Korean price rises. Nevertheless, it does not appear that in any country, with the possible exception of Finland, the start of the internal inflation can be attributed to an attempt to push wages ahead of prices.

In all countries, Government orders for armaments were appreciably higher than in previous years.<sup>2</sup> In the absence of firm and comprehensive controls, the diversion of resources from ordinary civilian production required in countries where unemployed manpower and capacity were lacking could be engineered only by an upward hoist of prices. It is known that the actual production of armaments is everywhere lagging behind schedule,<sup>3</sup> as has always been the common experience in the initial stages of expansion of defence programmes, but by how much is uncertain: figures of issues from Exchequers are, over short periods, poor indicators of the amount of resources currently used up in production to meet Government demands, and it seems that even Governments are handicapped in their planning of expenditure by some uncertainty as to the progress made in executing orders already given. It is probable that in 1951, as in the second half of 1950, the shadow of future heavier expenditure has been a more potent inflationary force than the expenditure actually so far made.

<sup>2</sup> See the SURVEY for 1950, Tables 66 and 67.

<sup>3</sup> Even in the United Kingdom, where the lag behind programme is believed to be less than elsewhere in Europe, the Prime Minister admitted in December 1951 that the Government would not succeed in spending the full amount budgeted for in the financial year 1951/52.



**Table 50**  
**CHANGES IN AVAILABLE RESOURCES AND THEIR ALLOCATION BETWEEN 1950 AND 1951**  
*Percentages of 1950 gross national product*

Change in	United Kingdom	Ireland	Netherlands	Denmark	Norway	Sweden	Finland	Belgium	France	Italy	Western Germany	Austria
Gross national product . . . . .	+2-2½	+3½	+3	+1	+3	+3	+9	+6	+6	+6-7	+11	+5-7
Terms of trade <sup>a</sup> . . . . .	-2½	-4	-3	-3½	+4	+5	+5	+2½	-1½	-1	-1	-
Real national income . . . . .	-0-½	-½	-0	-2½	+7	+8	+14	+8½	+4½	+5-6	+10	+5-7
Balance of payments . . . . .	-4-4½	-7½	+4½	+3	+6	+2	+4	+6	-1	-1	+2½	-
Resources available for domestic use . . . . .	+4	+7	-4½	-5½	+1	+6	+10	+2½	+5½	+6-7	+7½	+5-7
Government consumption . . . . .	+2½		-	+1	+1½	+1	.. <sup>b</sup>	+2	+1½	+0/1	+2	-
Gross fixed capital formation . . . . .	-½		-½	-	-1	+1	+3½	-	+1	+2	+2½	..
Personal consumption . . . . .	+0-1		-1	-3	-2	+0-½	+6½	..	+2	+4	+2	..
Stock accumulation . . . . .	+1-2		-3	-3½	+2½	+3½-4		..	+1		+1	..

NOTE. — Provisional estimates based mostly on data available in November 1951.

<sup>a</sup> Including the effect on real income of changes in invisible items in the balance of payments.  
<sup>b</sup> Included in personal consumption. Reparations deliveries are excluded from domestic resources.

Even in 1951, however, it seems likely that the additional claims made by Governments upon their countries' resources<sup>1</sup> were of the order of 2 to 2½ per cent of the 1950 gross national product in the United Kingdom, Belgium and (if occupation costs are taken into account) western Germany, and 1 to 1½ per cent in France, Norway and Sweden. In Austria, Denmark, Italy and the Netherlands the increment was probably negligible. As against these claims on resources, in many countries the rise in real national income was restricted by the decline in terms of trade and in some countries, especially in the United Kingdom, by the scarcity of raw materials. Little relief could come from a deterioration in the balance of payments, since in almost all countries there was need for further improvement. Among the countries shown in Table 50, the United Kingdom had a favourable balance of payments in 1950, but this had been achieved only at the expense of running down stocks which in 1951 had to be rebuilt. Hence the deterioration which occurred in the balance of payments did little to offset the increased claims on resources described. Only the Netherlands and Denmark were in a position where they were able to reduce their previously high rate of stock accumulation. Some countries were anxious to build up reserves both of foreign exchange and of commodities.

#### *The Increases in National Product achieved in 1951*

Given a sufficient increase in its national product, a country can, of course, offset the impoverishment implied by an increase in the proportion of its product which it has to devote to unenjoyable and unproductive purposes or to paying for its imports.<sup>2</sup> In the following table, estimates of the increases in national product achieved by various countries in 1951 are compared with the increases which they would have needed if the real income available for expenditure on personal consumption and for investment at home and abroad were to be no lower than in the previous year :

<sup>1</sup> The estimates quoted in the text are estimates of the net increase in public authorities' current expenditure on goods and services after offsetting some reductions in civil expenditure against increases in outlays on defence. It must be emphasized that they are necessarily only impressionistic estimates subject to a wide margin of error.

<sup>2</sup> Even in this case there may well be a problem of inflationary pressure in that only a small proportion of the increment in product can be released for consumption.

#### *Proportionate Increases in Gross National Product<sup>a</sup>*

	Required in 1951 if consumption and investment at home and abroad were to be kept stable	Actually achieved	
		1951	1950
		(Percentages)	
United Kingdom . . .	5	2 to 2½	5
Denmark . . . . .	4	1	8
Netherlands . . . . .	3	3	8
France . . . . .	3	6	2
Western Germany . . .	3	11	13
Italy . . . . .	0 to -1	6 to 7	..
Belgium . . . . .	-½	6	..
Norway . . . . .	-2½	3	5
Sweden . . . . .	-4	3	5

<sup>a</sup> The figures in the first two columns are derived from Table 50 above, those in the third column from the SURVEY for 1950, Table 65.

It will be seen that there is little correspondence between the first two columns of the table, and that on the whole the countries which were able to achieve the biggest increases were also those which were able to devote the bulk of those increases to improving their standards of consumption or to building up their assets. The world armaments boom seems, in fact, to have so far brought bigger proportionate gains to western Germany, Italy and Belgium than losses to, say, the United Kingdom and Denmark.

The rises in output achieved in the countries which already had full employment of their resources were not only, as might have been expected, lower than the rises possible in other countries, but also significantly lower than the rises achieved in 1950,<sup>3</sup> which were also achieved without much change in employment. In Denmark and the Netherlands, the slowing-down of the rate of increase seems to be attributable mainly to reduced demand for the products of particular consumers' goods industries. In the United Kingdom, the most important factor was the shortage of steel commented on in Chapter 2, which resulted in a decline in labour productivity in the steel-using industries. In general, the rate of increase of output seems to have got progressively slower as the year proceeded : in all countries the recession in consumer goods intensified, in Belgium, France and western Germany the stock of plant capacity not fully utilized in heavy industry was progressively reduced, and in the United Kingdom

<sup>3</sup> In part this was due to unfavourable harvests.

the steel shortage intensified at a time when British consumer industries began in their turn to be affected by the recession in demand.<sup>1</sup>

### *The Conflicting Aims of Government Policies*

It has everywhere in the past two years been an avowed object of Government policy to restrain inflation or, more specifically, to prevent a major rise in the cost of living. But the damping-down of inflation has necessarily not been the only aim of economic policy, and measures well conceived to solve other problems were bound in some cases to purchase solution only at the expense of increased instability of prices and incomes.

Thus, the deterioration in Europe's terms of trade in 1950 was caused not by an Act of God, but by the deliberate decision of a number of Governments to devalue their currencies with the aim of improving those countries' foreign exchange position. The rise in import costs which followed was greater and the diffusion of these increases through European economies wider than was expected by those responsible for the move: this is merely another way of saying that Governments, if they had possessed perfect foresight, might have taken the view that the required degree of increase in foreign exchange reserves could have been bought at the expense of a smaller increase in import costs and export profits, and so of less inflation than actually occurred. But, once the decision in 1949 to adopt new rates of exchange and later to stick to them in the greatly changed conditions of the post-Korean world had been taken, it would have been politically impossible—and probably socially undesirable—not to allow wage-earners and farmers to adjust their incomes somewhat to the new levels of retail prices and industrial profits. Inflationary forces from abroad had broken through the dam surrounding domestic incomes and the breach, if it were not to be bricked up by an upward adjustment of exchange rates, had to be filled by the water of increases in money incomes. The first policy, though it would certainly have been anti-inflationary, was unacceptable for other reasons: its rejection involved the acceptance of inflation.

At one stage it was the hope of some Governments that this inflation could be managed as a once-for-all operation, after the completion of which different types of incomes would settle down in the same ratio

to one another as before, although all at a higher absolute level in money terms. The prospects of this policy succeeding were of course by far the best in countries with considerable unutilized resources, where real income was able to increase considerably. Among the full employment countries the chances of success for a stabilization policy were probably greatest in countries such as the Netherlands, Norway and Sweden, where it is customary for the incomes of large blocks of the population to change in unison, and least in countries such as the United Kingdom, where wage-demands arise industry by industry, so that at every moment there are some groups of workers who feel that their relative wages are too low and should be raised. But without a simultaneous revision of all domestic money contracts (which would be practically equivalent to a revaluation of the local currency in terms of other currencies)—which was nowhere seriously suggested—there would still be some whose money incomes got left behind the general advance. Moreover, as long as boom conditions persisted outside, the risk of a repetition of the supposedly unique process would be run.

Attempts to overcome this by operating directly on prices would have implied a readiness to employ a very extensive, carefully co-ordinated system of controls, involving among other things heavy export taxes and import subsidies. Such a readiness was nowhere present: everywhere the general mood, as reflected in successive elections in different countries, was becoming less favourable to controls. Subsidies on consumer goods, which could have kept retail prices down, had, moreover, become less attractive to Governments because they would involve additions to public expenditure at a time when it was already increasing because of increased armament programmes. If they were to be financed out of direct taxation or the taxation of luxuries, they would aggravate a transfer problem which was already severe in heavily taxed countries; if not they would increase inflationary pressure by freeing incomes for other uses as much as they damped down the price-wage spiral.

In the meantime, Governments in most European countries recognized a need to increase reserves of foreign exchange, or at least to prevent their decline beyond a certain point. Every move to aid this by hampering imports or stimulating exports was bound to have inflationary effects at home. All these diffi-

<sup>1</sup> See also Chapter 2.

culties induced a number of Governments to seek escape during the year through a severe rationing of credits, which, by curtailing stockbuilding and to a lesser extent other investments and consumption, could be used to reduce inflationary pressure at home and simultaneously improve the balance of payments.

### *Inflationary Problems in Eastern Europe*

Most of what has been said so far relates mainly to western Europe. In the economies of eastern Europe, Governments have a rather direct control over movements of employees' incomes, so that price increases can be used to restrict consumption without generating "profit inflation" or a price-wage spiral of the western type. Their freedom of action in this field, however, is limited by the need to give increasing production incentives to workers and peasants.

These Governments are also able, by operating through State trading monopolies, to insulate internal prices from the effects of rises in international prices. They cannot, however, any more than other countries, escape the effect of a deterioration in the terms of trade,<sup>1</sup> and it would be surprising if rises in the prices of wool, cotton and rubber—together with the obstacles placed in the way of exports from the west by licensing restrictions—had not brought some loss of real income either because of an intensified scarcity of some materials or because of the necessity to use imperfect or costly domestic substitutes.

Armaments programmes have been expanded. The increase called for by the 1951 budget in Hungary was equivalent to 3 per cent of the 1950 national output, as great, that is, as the increase in any western country, and the budget also made provision for increases in stockpiling amounting to another 2 per cent of national product. The Polish budget provided

for an increase of 46 per cent in defence expenditure; measured at constant prices in terms of national income, this increase is probably comparable to the Hungarian increase. In Poland also, one-tenth of the total budgetary expenditures was earmarked for "reserves for national disasters". In all the Cominform countries, output plans were revised upwards with an increased emphasis on heavy industry<sup>2</sup> and one of the reasons given for the revisions was the need to secure much larger armaments production and the maintenance of larger defence forces.<sup>3</sup> In Yugoslavia, only a small increase in total industrial production was planned, but a greatly increased proportion of the total was to be devoted to defence purposes.

The already low level of these countries' trade with the outside world and the fact that it was mainly a matter of bilateral deals meant that their internal situation could not be greatly relieved by allowing their balances of payments to deteriorate: only in eastern Germany and Yugoslavia was this possible. Yugoslavia received foreign aid amounting to \$186 million in 1951—or about 5 per cent of the national product—compared with \$110 million in 1950. Eastern Germany, however, appears to have reduced rather than increased its deficit in the course of the year.<sup>4</sup>

<sup>2</sup> See Chapter 2, section 4, page 6, of this SURVEY and the *Bulletin*, Vol. 3, No. 1, page 20.

<sup>3</sup> Thus, the Deputy Prime Minister of Poland, Mr. Minc, said in a speech on 9 October 1951: "A State which, at such a time, did not show concern for the increase of its defence strength, for the development of its armament industry, did not show concern for supplying its army with an adequate amount of modern arms and equipment, such a State would not deserve the respect of its people. And People's Poland is not such a State." Similarly, the Journal of the Cominform, *Pour une démocratie populaire et une paix durable*, wrote in its issue of 16 February 1951: "La nécessité d'accélérer le rythme de l'édification socialiste conditionné par nos nécessités intérieures découle aussi de la situation internationale actuelle".

<sup>4</sup> In 1950, eastern Germany had an estimated trade deficit (reparations excluded) of some \$125 million. In 1951, imports were maintained but exports increased substantially.

<sup>1</sup> See the SURVEY for 1950, page 139.

## 2. THE PROCESS OF INFLATION

### *The Price-Income Spiral*

Indices of wholesale prices, always the most sensitive indicators of the domestic effects of changes in international markets, continued to rise in all western European countries during the first quarter of the

year. Since then they have flattened out and even fallen in some countries, largely as a result of the turn in world prices, but partly as a result of domestic consumer resistance, which indeed, developed so early in the field of textiles in some countries that the



**Table 51**  
**COST OF LIVING, HOURLY IN INDUSTRY EARNINGS AND PRICES PAID TO FARMERS**  
*Percentage changes*

Country	COST OF LIVING					HOURLY EARNINGS IN INDUSTRY					PRICES PAID TO FARMERS	
	Sept. 1949 to Sept. 1950	Sept. 1950 to Mar. 1951	Mar. 1951 to June 1951	June 1951 to Sept. 1951	Sept. 1950 to Sept. 1951	Sept. 1949 to Sept. 1950	Sept. 1950 to Mar. 1951	Mar. 1951 to June 1951	June 1951 to Sept. 1951	Sept. 1950 to Sept. 1951	Sept. 1949 to Sept. 1950	Sept. 1950 to Sept. 1951
Austria . . . . .	5	17	3	15	39	5	20	7	16	48	..	..
Belgium . . . . .	3	4	1	2	7	4	5	5	1	12	1	6
Denmark . . . . .	8 <sup>a</sup>	7 <sup>a</sup>	2 <sup>a</sup>	1 <sup>a</sup>	11 <sup>a</sup>	5	6	0	4	13	0	7
Finland . . . . .	15	10	2	4	17	25	26	0	3	30	25	16
France . . . . .	13	9	5	3	18	15	12	8	13	36	..	..
Western Germany . .	-5	9	4	-1	11	6	8	7	..	..	..	..
Greece . . . . .	9	12	-2	-1	9	..	..	..	..	..	-3	7 <sup>b</sup>
Iceland . . . . .	25	14	6	6	28	..	..	..	..	..	..	..
Ireland . . . . .	0 <sup>c</sup>	3 <sup>c</sup>	6 <sup>c</sup>	2 <sup>c</sup>	11 <sup>c</sup>	4	6	5	..	..	..	..
Italy . . . . .	2	4	4	0	7	2	5	8	1	14	7	3
Netherlands . . . . .	12	5	3	0	9	10	5	0	1	6	16	3
Norway . . . . .	8	6	8	2	16	4	10	5	0	16	3	8
Portugal . . . . .	-3	2	-3	3	1	..	..	..	..	..	..	..
Sweden . . . . .	1	12	4	3	19	4	20 <sup>d</sup>	0 <sup>d</sup>	2	23	..	..
Switzerland . . . . .	-1	2	2	1	5	0	0	1	2	3	-3	0
Turkey . . . . .	-10	5	-1	-1	3	..	..	..	..	..	..	..
United Kingdom . . .	2	5	4	3	12	4	5	2	2	10	9	12

Sources: See "Notes to the Statistics".

<sup>a</sup> Month following that shown.

<sup>b</sup> August 1950 to August 1951.

<sup>c</sup> Month preceding that shown.

<sup>d</sup> All the increase in January-June has been allocated to January-March.

price of some finished goods never fully reflected the peak world price of raw material.<sup>1</sup>

The movement in the cost-of-living indices differed significantly from that of wholesale prices, reflecting partly the time-lag between raw material prices and the retail prices of finished manufactures, and partly to stickiness of certain internal prices, for instance controlled and subsidized food prices. It is interesting to note (see Table 51) that, whereas the increases in cost of living in various countries in the first year after devaluation showed very little correlation with the rates of devaluation, the correlation is much more pronounced in the period from September 1950 to September 1951. In the first year after devaluation, a number of the devaluing countries had succeeded

in preventing any significant increase in the cost of living by a policy of subsidies and more or less rigid control of internal prices and wages. Under the pressure of the post-Korean boom, however, these countries, which were nearly all full-employment countries, could not any longer keep the latent inflationary forces under control and a strong spiral of price and wage increases started. The countries which had devalued little or not at all were more able to resist the inflationary trends after Korea, partly because they had not already exhausted their resistance to inflation in the previous period and partly because most of them had a greater reserve of unutilized resources. Thus, in the twelve months after September 1950, the increases in the cost of living in the first group of countries ranged from 11 to 19 per cent—if the extreme cases of Austria and Iceland are neglected—while in the second group the range was from only 5 to 7 per cent.

In the summer and autumn months of 1951 (see Table XVII in Appendix A), the cost-of-living index ceased rising or even fell in a number of countries and the rate of increase became slower in most of the

<sup>1</sup> The indices of wholesale prices shown in Table 49, are by no means strictly comparable with one another: both their scope and their weighting differ from country to country. Moreover, all wholesale price indices are more or less arbitrary mixtures of raw materials prices and prices of finished or semi-finished manufactures. The prices of finished goods tend to lag behind indices of import prices: domestic quotations for raw materials often move more sensitively than indices of import prices, which, because of the time taken in transport and the existence of forward or bulk-purchase contracts, tend to lag behind world prices.

others. Only in Austria, France and Iceland was there still a strong upward tendency. In France, the successive shocks of a moderate devaluation in 1949 and a speculative boom in 1951 were enough to lever up the cost of living by 33 per cent in the two years to September 1951.

Indices of wholesale prices and the cost of living are less indicative of the process of inflation in eastern European countries than in the West. Governments may decree price increases to mop up surplus purchasing power; in the same way in which western Governments apply indirect taxation. Such a move, while inflationary in the sense that a rise in prices with its inevitable social effects is used to control the allocation of resources, need not give rise to a subsequent spiral of "profits", wages and prices. But price increases may also be decreed to provide better incentives for peasants or other non-nationalized producers, and thus be followed by secondary inflation of income.

In addition, it is difficult to measure changes in the average cost of living in eastern European countries; the same commodity is sometimes sold at more than one price, and there are from time to time shifts in the relative importance of the market for rationed goods sold at low prices and the free market. In Hungary, after a black market had developed in 1950, a legal free market was inaugurated in January 1951, on which commodities were sold for prices twice to five times as high as when they were bought on the ration; when, in December 1951, single prices were again introduced for basic foodstuffs, they were fixed at levels twice to thrice as high as the prices previously charged for goods sold on the ration. These measures in Hungary seem to have been successful in their objective in mopping up purchasing power—in fact, goods were soon being sold at prices below the new official prices. But in Poland, where inflation and large-scale black markets were thought to have been eliminated by the monetary reform of October 1950, retail prices rose in 1951, and by the middle of the year black market activity had reappeared. In Czechoslovakia, where the gap between prices of unrationed goods was already wide, prices on the legal free market rose still further.<sup>1</sup> Only in the Soviet Zone of Germany does the cost of living seem to have remained more or less stable, increases in average prices due to

a rise in the proportion of goods sold in the free market at high prices being balanced by a small reduction in the free market prices themselves.

In the twelve months before October 1950, wage-rates had risen by not more than 4 to 5 per cent in most western European countries, even those which had devalued heavily in 1949. A comparison with Table 6 in Chapter 2 shows (although the periods covered are not quite identical) that in the United Kingdom and the Scandinavian countries wage increases were of the same order as the increases in output per man-hour, in the Netherlands and France wages increased considerably more than output per man-hour; in Italy, Austria and western Germany they increased much less. In the next twelve months, the rises in wages were of quite another order: wage-earners strove to compensate themselves for the rise in their cost of living and, in a boom atmosphere in which labour was, in industrial districts, scarce, and profits, thanks to higher prices, had increased their share of the national income, their claims were not strongly resisted either by employers or by Governments. In this period, therefore, wages went far ahead of the increases in output per man in all countries of northern Europe, and in France and Austria; only in Belgium, Italy and western Germany—all countries with considerable unemployment—were the increases in wages of about the same order as the increase in output per man.<sup>2</sup> In Sweden, the wage truce was explicitly ended and wages jumped by almost 20 per cent during the first quarter of 1951; this rise compared with an increase of about 4 per cent since devaluation. In the United Kingdom, the year started and finished with rises in miners' wages; in between there had been a full cycle of successive increases in the wages of other groups of manual workers. The wage increases granted in 1951 up to November, the last month for which statistics are available, totalled more than had occurred even in the full year 1950, when the post-war inflation was at its height. In France there were, during the year, two increases in minimum wages—in March and September—each of which is calculated to have occasioned a rise of about 15 per cent in average earnings. In Austria, under a general price-wage agreement arrived at in July (the fifth since the war), wages, which had already risen by

<sup>1</sup> See the speeches by the Prime Minister reported in *Rudé Právó*, 1 and 10 November 1951.

<sup>2</sup> This sentence requires two qualifications: the Netherlands should be excluded from the generalization about western Europe and, if there were statistics of man-hours worked, it might be found that the second generalization did not apply fully to Belgium.

nearly 30 per cent over the previous twelve months, were raised again by nearly 15 per cent, and civil service salaries, which had previously been very depressed, by even more. In Finland, under a sliding-scale agreement, wages rose regularly with the cost of living, as measured by an index admitted to have a downward bias, until May; the trade unions were then persuaded to accept a temporary standstill agreement in exchange for adjustments in rates of indirect taxes and subsidies, but from the beginning of 1952 wages will again fluctuate with a newly constructed index of the cost of living.

Farmers' incomes, too, have almost everywhere been increased. In some countries (the United Kingdom, Norway and Sweden)<sup>1</sup> this happened as a result of overt acts of policy by Governments, which fixed agricultural prices at levels sufficiently higher to maintain a certain parity between farmers' incomes and the incomes of others, particularly wage-earners. Elsewhere the increase came about as a result of a combination of spontaneous market movements and corrective Government policy. Thus, in France and western Germany, during the winter of 1950/51 the uncontrolled prices of livestock produce rose in response to the rise in demand occasioned by increases in other incomes and, in order to prevent the misuse of grain as animal feed, Governments later raised the controlled prices for crops. Only in Italy do farmers' incomes seem to have got left behind by others.

Although the rate of increase of the cost of living, as shown above, declined in a number of countries during the summer and autumn 1951, there is no reason to expect that the wave of increases in wages and farmers' incomes has come to an end. In a number of countries all evidence points the other way. In Austria, it was hoped that the wage-price agreement of July would bring at least a breathing space; but, although it covered agricultural prices and public utility tariffs as well as wages, it left many industrial prices free and these have risen since as a direct result of the higher costs brought by the increase in wages; as a result the stabilization policy has already failed. In France, the last big increase in wages, that of September 1951, was quickly followed by increases in several prices fixed by the State and the trade unions are now working to get the principle of automatic

sliding-scale adjustments of wage-rates adopted; unless simultaneously a more severe anti-inflationary policy were adopted, this would imply a further speeding-up of the price-wage spiral. In the United Kingdom, a special review of farm prices was recently made and some increases granted; others are expected in February 1952; neither these nor the recently announced rise in railway freight rates are yet reflected in retail prices. The Government's acceptance of the inevitability of wage increases can be seen from its concession of increases of pay ranging up to 10 per cent to civil servants. In Sweden, negotiations on the trade unions' claim for a further general wage increase were to start in January 1952; a rise of 7 per cent seems to be the minimum that can be expected as their outcome. Further increases are expected in Finland. In Norway, wages were raised by almost 6 per cent in December and adjustments in other incomes are expected in the spring of 1952.<sup>2</sup>

It is the declared policy of eastern European Governments to pass on the fruits of higher productivity in the form of price reductions rather than of adjustments of money wages; thus piece-rates are periodically reduced in order to keep total money earnings constant. This being so, it is striking to find that the average earnings of industrial workers were, in the third quarter of 1951, 7 per cent higher than they had been twelve months earlier in Hungary, 10 per cent higher in Czechoslovakia and 15 per cent in the Soviet Zone of Germany. There was, moreover, in December 1951, on the occasion of the price reform, a further increase of as much as 20 per cent in Hungary. In Yugoslavia, the process of converting privileges to buy rationed goods into cash monetary equivalent, which is not yet completed, has had the effect of raising money wages. In nearly all eastern European countries, measures were introduced in the course of the year to assist in keeping the national wage bill under control by relating the bill for individual factories to their output and by setting wage efficiency standards at a high level.

Changes in farmers' incomes in eastern Europe are difficult to assess because of the complication of the pricing system; it is known, however, that most farm prices in Hungary remained unchanged in 1951 in spite of the great increase in the harvest as compared

<sup>1</sup> In Finland, a similar system will be introduced early in 1952.

<sup>2</sup> A question at issue was whether or not increases in the cost of living should be compensated by increases in wages if they are directly due to rises in rates of indirect taxation.

**Table 52**  
**WEEKLY REAL WAGES IN INDUSTRY**  
*September 1949 = 100*

Country	1950				1951		
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
United Kingdom . . . . .	100	101	102	103	103	102	100
Netherlands . . . . .	98	98	98	99	98	97	96
Denmark <sup>a</sup> . . . . .	98	96	98	96	94	93	96
Norway <sup>a</sup> . . . . .	99	101	98	101	99	100	97
Sweden . . . . .	102	104	103	103	106	109	106
Finland . . . . .	98	101	106	109	117	121	120
Belgium . . . . .	99	105	102	103	103	104	106
France . . . . .	98	100	103	105	106	108	112
Italy . . . . .	105	105	102	102	103	103	106
Western Germany . . . . .	102	107	113	117	116	115	117
Austria . . . . .	97	100	101	104	105	105	107
Switzerland . . . . .	101	102	102	102	101	100	99

Sources : See "Notes to the Statistics".

NOTE. — The figures are the ratio of index numbers of earnings in industry and of the cost of living. No allowance is made for taxes, family allowances,

etc., not included in these index numbers.

<sup>a</sup> Second half 1949 = 100.

with 1950, but that the resulting rises in farmers' cash holdings were, as in 1950 in Poland, offset by subsequent rises in the prices of manufactured goods.

#### *The Movement of Real Wages*

Table 52 sums up in a single set of very crude figures <sup>1</sup> the course of the price-wage race over the past two years. It will be seen that, in Denmark and the Netherlands, the real wages of industrial workers had already been reduced in 1950 and that the fall continued in 1951.

In the United Kingdom there was a rise in 1950 as productivity increased, but a fairly steady fall in 1951. In Norway there was a decline in 1951. In Sweden, industrial wage-earners increased both their share of the national income and their standard of living appreciably in the spring of 1951, but the subsequent rise in prices has deprived them of some of their gains. In western Germany, industrial wages

went ahead of other earnings in 1950 but have stagnated since, and it is estimated that the share of all employees in the national income declined from 77 per cent in the second half of 1949 to 70 per cent in the first half of 1951. Even in countries where real wages have risen in 1951 the increase has been, in Austria and Finland, no greater than the rise in other incomes and in Belgium considerably lower. In Switzerland, real wages declined slightly in 1951, but, because of an increase in employment, wage-earners' total real income rose. In France, the rise in wages seems to have about kept pace with the increase in other incomes, but to the extent that family allowances, an important component of employees' incomes, have fallen in real terms wage-earners have lost ground.

All in all, it can be said that, in western Europe, the working of the inflationary spiral has so far made a considerable contribution to the relief of inflationary pressure of demand at the expense of the largest class of consumers.

The shoe has pinched at the same point in most countries : everywhere it was the prices of clothing and household goods which rose most sharply. Changes in the level of rents did not affect the cost of living significantly except in the Netherlands; in Italy, where the rise in rents was considerable, expenditure on rents still makes up less than 2 per cent of

<sup>1</sup> The figures in the table represent the ratio of indices of the weekly earnings of industrial workers to indices of the cost of living. As neither of the terms of the ratio is necessarily an accurate indicator of what it purports to measure, the figures are peculiarly subject to error. It should be noted, moreover, that the indices of weekly earnings used make no allowances for direct taxes or family allowances. To the extent that the burden of direct taxation has increased over the period and family allowances lagged behind other types of income, the series shown have an upward bias if considered as indicators of the movement of average real net earnings.



Table 53. — RETAIL PRICES OF IMPORTANT COMMODITIES IN TERMS OF WORKING TIME OF INDUSTRIAL WORKERS  
IN SELECTED EUROPEAN COUNTRIES  
Minutes per unit of commodity

Country	Period	Bread Potatoes Beef Pork Bacon or ham Butter Margarine Sugar Coffee							Milk (per litre)	Eggs (each)	Coal (per 50 kg.)	Gas (per cubic metre)	Electricity (per kWh)	
		(per kilogramme)												
Austria (Vienna)	1949 average	23	9	180	359	132	306	99	57	615	16	251	7	3
	1950 average	26	12	178	277	145	271	100	60	747	13	318	7	4
	June 1950	25	12	168	264	124	281	112	57	740	9	317	7	4
	June 1951	25	9	188	209	162	222	89	60	626	15	449	6	4
Belgium	October 1949	23	6	302	253	367	297	139	38	166	11	272	8	10
	October 1950	22	6	297	219	344	252	84	37	337	10	261	8	9
	June 1950	19	6	273	215	330	230	86	33	317	6	243	8	8
	June 1951	19	6	273	215	330	230	86	33	317	6	243	8	8
Denmark	1949 average	6	6	83	59	67	141	60	13	133	5	127	8	8
	1950 average	6	7	108	106	98	126	55	12	232	5	121	7	8
	July 1950	6	9	111	104	96	120	56	12	248	4	118	7	7
	July 1951	5	9	116	104	99	108	73	15	259	5	173	7	7
Finland	1949 average	19	6	108	110	218	242	75	46	50 a	8	180 b	10	8
	1950 average	21	7	107	131	227	214	71	41	43 a	6	160 c	8	7
	June 1950	20	8	110	129	219	236	72	48	42 a	7	160	8	7
	June 1951	17	6	91	119	187	133	44	31	47 a	5	...	7	6
France (Paris)	1949 average	28	13	157	299	205	455	198	76	337	16	379	11	15
	1950 average	26	20	153	257	169	474	205	77	493	12	370	12	14
	June 1950	26	26	114	223	146	403	198	79	474	11	374	13	14
	June 1951	23	19	154	320	179	348	212	61	508	10	365	14	12
Germany (western zones)	15 December 1949	23	8	157	240	260	253	119	57	1,396	22	193	12	12
	15 December 1950	24	5	152	192	224	242	100	52	1,325	12	184	11	11
	15 June 1950	23	9	152	164	222	260	111	56	1,370	16	190	12	11
	15 June 1951	25	6	150	157	205	253	92	47	1,268	15	184	10	10
Italy	1949 average	42	14	337	321	717	528	250 d	116	496	33	801	12	14
	1950 average	40	19	313	318	661	468	187 d	109	653	13	768	13	14
	June 1950	40	21	316	324	648	435	173 d	109	629	10	753	13	14
	June 1951	35	17	315	320	648	410	197 d	97	660	25	731	12	14
Netherlands	1949 average	23	7	158	236	223	330	95	52	217	14	245	9	16
	1950 average	21	9	233	250	179	310	97	49	501	13	273	9	15
	May 1950	21	9	231	214	177	301	98	49	506	13	255	9	15
	May 1951	22	9	228	247	178	266	125	55	461	12	310	9	14
Norway	1949 average	10	7	89	94	90	130	21	17	85	9	148	4	...
	1950 average	12	7	98	99	95	140	37	16	134	6	138	4	...
	June 1950	13	8	85	90	86	152	45	16	160	5	138	4	...
	June 1951	14	8	130	134	128	142	43	15	150	6	161	4	...
Sweden	1949 average	27	6	65	123	156	134	66	20	137	8	148	5	4
	1950 average	26	6	68	116	153	131	61	19	194	8	145	5	4
	June 1950	26	7	65	124	150	130	60	19	181	8	142	5	4
	June 1951	24	7	63	122	136	123	69	19	222	7	170	4	3
Switzerland	1949 average	13	10	147	196	196	263	88	29	190	9	301	9	9
	1950 average	14	10	141	184	173	261	77	28	228	8	261	8	9
	June 1950	14	12	141	175	167	261	77	27	220	7	244	7	9
	June 1951	14	11	143	193	177	262	92	31	272	7	281	7	9
United Kingdom	1949 average	11	6	80	91	112	71	40	21	166 e	6	94	5	...
	1950 average	13	6	80	96	113	86	40	20	160 e	6	94	5	...
	June 1950	13	7	80	96	114	88	40	20	160 e	6	92	5	...
	June 1951	13	7	74	89	107	111	52	18	163 e	6	95 f	5	...
Czechoslovakia (rationed goods only)	September 1951	19	6	119	...	105 g	190	90	37	...	9	...	...	...
	June 1949	19	9	160	314	355 g	440	190 h	112	...	13	474	...	9
	June 1950	15	...	117	224	256 g	353	196 h	90	...	...	...	...	...
	December 1951	34	...	251	322	428 g	810	293 h	137	...	...	...	...	...
Poland	October 1949	29	10	110 i	156	220 g	480	235	110	980	30	250	...	...
	First quarter 1951	32	11	140 i	196	282 g	630	244	114	2,610	26	261	...	...

Sources and methods: See "Notes to the Statistics".  
NOTE. — The figures are not always strictly comparable as between countries.

a Coffee substitute. c October 1950. e Tea.  
b October 1949. d Olive oil. May 1951.

g Lard. h Vegetable oil. i Veal.

total personal expenditure. Only in western Germany, Norway and the Netherlands did the price of food rise as much as the index of the total cost of living. It will be seen from Table 53, which shows the price of basic foodstuffs and fuels in terms of the minutes of manual labour needed to buy them,<sup>1</sup> that the differences between the retail price structures of western European countries are still much the same as they were two years ago.<sup>2</sup> Norway and the United Kingdom, where food prices are still relatively low, continue to contrast sharply with Austria, France and Italy. Some of the social benefits brought by the policy of food subsidies still remain.

In all eastern European countries, except eastern Germany, the average real wages of industrial workers have undoubtedly fallen; as was mentioned earlier, money wages have risen, but less fast than prices. This comes out most clearly in Hungary, where, now that the differential price system and the rationing of commodities have been discontinued, comparisons with earlier periods can be simply made. Between the spring of 1950 and the end of 1951, while the average money earnings of industrial workers increased by 28 per cent, the prices of sugar, vegetable oil, pork, lard and milk were almost doubled and those of bread, butter and beef almost tripled. In Poland too, as Table 53 shows, the length of time which it takes an industrial worker to earn supplies of basic foodstuffs has increased since 1949, the rise in the price of meat being particularly great. Such falls in the average standard of living of industrial workers are probably inevitable in countries where the pace of industrialization is such as to increase the total number of industrial workers, temporarily at any rate, faster than the supply of consumer goods. They have, however, been recently accentuated by the diversion of a greater share of the industrial effort to defence programmes.

The structure of relative prices in the eastern European countries seems to be similar to that of the Soviet Union: the prices of basic foodstuffs are fixed at high levels in order to avoid the necessity for rationing. Czechoslovakia provides an exception to this;

there, although industrial wages were in 1951 ten times as high as before the war, the prices of rationed goods were only three times as high, and there was a consequent need for rationing together with a big overspill of purchasing power on to the free markets.

#### *Personal Consumption in 1951*

With real wages moving in the way described, it is not surprising that the share of personal consumption in the resources available after providing for higher defence outlays and for the increased cost of imports<sup>3</sup> should almost everywhere have fallen in 1951. Only in the United Kingdom and Ireland was there some increase in the proportion as a result of a deterioration in the balance of payments, much of which, however, was the counterpart of a rise in stocks of goods, just as the improvement of 1950 had been purchased at the expense of a running-down of stocks of imported materials. But in most other countries the change was in the other direction; the Governments of Denmark, western Germany and the Netherlands were bent on improving their balances of international payments; in Finland and Sweden, policy was designed to accumulate reserves of foreign exchange against the future; Norway and Sweden placed some emphasis on stock accumulation; in Belgium, the redistribution of the national income to the detriment of the mass of consumers implied a heavy export surplus.

In Denmark and Norway consumption fell by perhaps 3 per cent as compared with 1950; in the Netherlands the fall was smaller, but this followed reductions in both the two previous years; in the United Kingdom there was a rise, which ran contrary to declared Government policy, in the first half of the year, but the total for the whole year was probably only slightly above the 1950 level. All these were countries whose Governments were counting on falls before the year started in order to cover their increased burden of armaments and imports. Even in Sweden and Belgium, both countries where total resources for domestic civil use were expected to, and actually did, increase, the rise in consumption was insignificant. In France, western Germany and Italy, the rise in the total volume of consumption was perhaps 3 per cent, and in Austria and Finland somewhat greater. By 1951 the volume of consumption in France and western Germany, which had previously been below pre-war levels, had about got back to

<sup>1</sup> The comparison between different countries cannot be pressed too far: not only are there differences between the quantities of particular foods consumed in different countries, but the importance of family allowances, which have nowhere been taken into account in making the calculations, is by no means equal in all countries. In the extreme case—France—the family allowance received by an industrial worker with three children is as great as his basic wage.

<sup>2</sup> For a discussion of the position then, see the 1949 SURVEY, pages 35 to 37.

<sup>3</sup> That is, real income *minus* Government expenditure on goods and services.

**Table 54**  
**VOLUME OF CONSUMPTION**  
1949 = 100

		1950				1951				
		First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	July	Aug.	Sept.
<i>United Kingdom:</i>	Food . . . . .	100	98	106	109	100	99	102	100	100
	Drink and tobacco . . . . .	91	100	111	108	99	103			
	Clothing . . . . .	87	104	101	124	98	99	94	78	82
	Household goods . . . . .	101	104	107	130	117	108	89	75	82
	Travel and entertainment . . . . .	98	111	124	102	99	112	..	..	..
	Total consumption . . . . .	96	100	106	109	100	102	103		
<i>Netherlands:</i>	Food, drink and tobacco . . . . .	92	96	104	102	100	96	92	..	..
	Durable consumers' goods . . . . .	87	100	114	99	103	80	91	..	..
	Total consumption . . . . .	91	98	110	99	99	91	97	..	..
<i>Denmark:</i>	Food . . . . .	91	94	95	98	86	90	90	89	87
	Textiles . . . . .	92	109	104	132	86	97	73	77	81
	Total retail sales . . . . .	91	99	100	114	86	92	83	86	84
<i>Norway:</i>	Food . . . . .	98	99	98	104	89	94	90	91	91
	Textiles . . . . .	77	113	85	97	71	88	61	58	76
	Total retail sales . . . . .	90	106	101	112	89	100	91	92	94
<i>Sweden<sup>a</sup>:</i>	Food . . . . .	103	102	102	99	100	95	90	89	86
	Clothing . . . . .	102	97	105	114	97	87	95	91	84
	Total retail sales . . . . .	104	104	107	108	106	100	98	93	88
<i>Finland:</i>	Co-operative retail trade . . . . .	91	114	115	124	86	106	100		
<i>Belgium:</i>	Food (co-operatives) . . . . .	111	112	138	118	137	121	111	119	119
	Textiles (department stores) . . . . .	91	106	112	108	103	88	93	68	77
	Total retail sales (co-ops) . . . . .	108	107	129	112	128	108	97	105	111
<i>France:</i>	Co-operatives (mainly food) . . . . .	104	111	122	114	120	116	129	132	132
	Depart. stores (mainly textiles) . . . . .	106	112	114	162	139	128	109	94	135
<i>Switzerland:</i>	Food . . . . .	98	103	106	104	103	102	102	103	101
	Textiles . . . . .	94	106	102	156	105	103	108	67	92
	Total retail sales . . . . .	95	101	103	127	106	104	107	90	98
<i>Western Germany<sup>b</sup>:</i>	Food . . . . .	100		119		106	118	104	108	107
	Beverages and tobacco . . . . .	100		118		112				
	Clothing . . . . .	100		144		127		103	103	94
	Household goods . . . . .	100		146		109		111	122	132
	Travel and entertainment . . . . .	100		99				..	..	..
	Total consumption . . . . .	(95)	(105)	(110)	(130)	110	(111)	(109)	(111)	
<i>Austria:</i>	Food . . . . .	91	101	117	122	101	108	103	107	110
	Textiles . . . . .	66	84	76	126	88	93	77	63	84
	Total retail sales . . . . .	81	91	100	126	93	97	94	91	98

Sources: See "Notes to the Statistics".

NOTE. — The series for the United Kingdom, the Netherlands and western Germany represent the volume of total consumption, and for other countries the volume of retail sales. In a number of countries, the index numbers of retail sales cover only certain types of shops and may not be representative for retail sales as a whole. The volume of retail sales is officially estimated for Denmark; for other countries index numbers of the value

of sales were deflated by the cost-of-living index or its relevant component. By using a similar method, the official estimates of the volume of consumption for the United Kingdom and western Germany have been extrapolated from July to September 1951.

<sup>a</sup> Corresponding period of 1949 = 100.

<sup>b</sup> First half 1950 = 100.

the standard of the late 'thirties, though with some change in its composition.<sup>1</sup>

These small year-to-year changes in the rather nebulous statistical magnitude called total volume of consumption conceal, however, more important short-period changes in its various components. During the course of the year, a sharp reaction set in from the buying fever brought on in the autumn of 1950 by the post-Korean nervousness, and retail sales everywhere fell back as larders and wardrobes were filled or purses emptied.<sup>2</sup> This reversal of the previous movement had already affected Christmas sales in 1950 in some countries—for example, in Belgium and the Netherlands—but in countries where demand had swung upwards less rapidly in 1950 (the United Kingdom and France) the falls did not come until the second or third quarter of 1951. The magnitude of the recession varied greatly from country to country: it appears to have been greatest in the case of textiles in Denmark, the Netherlands and Belgium. Everywhere the fluctuation was greatest in the case of durable goods, purchases of which, being postponable, are more sensitive to expectations of future prices than purchases of perishables. Clothing and footwear had been eagerly bought on a large scale when substantial rises in their price had been expected; after the increase in sales on a rising market, it was natural that the decrease on what was believed to be a falling market should be correspondingly heavy. Such relatively new types of durable goods as light motor-bicycles (in Denmark, France and Italy) and television sets (in England) were unaffected by the developments, and their sales continued to increase by leaps and bounds.

Consumption of food was more stable. In France and Italy, both countries where the total volume of consumption increased, there was little change in the consumption of food, and in Sweden, where real income was significantly higher, consumption of foodstuffs seems to have been actually some 5 per cent lower in the first half of 1951 than it had been in the corresponding period of 1950. This fall took place over a period when sales of durable goods, in especial

of motor-cars, were booming. It is impossible yet to discover to what extent this was due to an increase in the relative price of food and to what extent to changes in the distribution of income or increased opportunities of buying imported goods.

In order to form a picture of the movement of consumption in eastern European countries, it is necessary to rely mainly on statistics of the production of various types of goods. These suggest that there have been in most countries increases in the supplies of some durable goods, notably textiles and shoes in eastern Germany, Poland and Hungary. Food supplies, however, which absorb one-half or more of total personal expenditure, have been kept down by the inelasticity of agriculture; supplies of meat have even fallen, as described in Chapter 2. New housing construction, which went on in 1951 at about the same rate as in 1950, was not high enough even to maintain existing housing standards for the growing urban population. In the Soviet Zone of Germany, there was a big proportionate increase in the consumption of most basic consumer goods; further big increases will, however, be required if, as is planned, pre-war standards are to be restored by the end of the Five-year Plan in 1955. All in all, it may be that the total volume of consumption in eastern European countries increased by up to 5 per cent in 1951. Because, however, there has been a considerable migration of workers from the countryside,<sup>3</sup> where the standard of living is well below the average, to the industrial areas, the average standard of living of urban workers declined somewhat.<sup>4</sup> In the meantime, the stepping-up of defence expenditure is bringing with it some conversion of light industries, particularly in Czechoslovakia, from the production of civilian consumer goods to the production not only of uniforms and other requisites for the armed forces, but also of "intermediate" goods.

### *The Progress of Capital Formation*

In spite of the fact that rearmament orders were necessarily concentrated on the industries producing investment goods, the level of fixed capital formation

<sup>1</sup> Food consumption per head was actually higher in western Germany than in 1936; consumption of drink and tobacco was still down somewhat, consumption of clothing about the same as before the war, housing standards still very depressed. In France, the consumption of food, housing services and, in particular, clothing, was still not back to pre-war levels, but the consumption of other goods and services had increased sufficiently to offset it statistically.

<sup>2</sup> See Table 54.

<sup>3</sup> The number of persons employed in industry increased in 1951 by 600,000 in Poland, by 200,000 in Hungary, and in Czechoslovakia, already a highly industrialized country, by 120,000. Perhaps half of the increment can be explained by the absorption into industry of formerly independent craftsmen and of women already living in towns. The rest involved migration from the countryside.

<sup>4</sup> See discussions of real wages of industrial workers in preceding section.



did not decline greatly in any western European country in 1951. In France and Sweden it seems to have been somewhat higher, and in western Germany and Italy 10 per cent higher, than in 1950; in Denmark the Netherlands, the United Kingdom and Norway, there were falls of up to 3 per cent. All the countries in the first group had a higher total of resources available for domestic civilian use than in 1950 and the Swedish Government in particular had actually expected a small increase in investment; the Governments of all the countries in the second group had counted on some fall in resources available for use in civil purposes and announced their intention of making small cuts in investment. On the face of it, the results look like a triumph of successful planning.

This turns out to be a statistical illusion when the movement of the various components of investment is studied. In the United Kingdom, the decrease in the total can be wholly explained by an unplanned decrease in the output of the building industry, due in part to bad weather during the first half of the year and in part to a shortage of steel, which reduced productivity; on the other hand, although measures were taken by the Government to reduce the supply of commercial vehicles (and motor-cars) to the home market, deliveries were in fact maintained at the previous year's level. In Norway, the decline was due not to a reduction in new investment, but to considerable sales to foreign buyers of secondhand ships at high prices. In both Denmark and Norway, planned declines in building activity were offset by unplanned increases in other investment. Almost everywhere in western Europe total investment in plant and machinery was higher than had been contemplated by Governments.

At the same time, there have been, in a number of countries, reductions in public investment.<sup>1</sup> Such cuts were tempting to make both because in some cases they would ease public budgets and because they were easy to enforce. It is difficult, however, to believe that the average quality of investment, from the point of view of its long-term contribution to higher productivity, has not been reduced by this concentration of cuts on a few basic industries or services.

Even in countries such as western Germany and Italy, where investment was higher than in 1950, the increment does not seem to have been used in the

most desirable way. New investment in the Ruhr coal industry, which is admitted to be urgently necessary, is still held up because of financial difficulties. Planned investment in the field of energy, iron and steel and chemicals has proceeded satisfactorily in Italy,<sup>2</sup> but public works on roads and irrigation and flood control schemes remain low, and a start has hardly been made in spending the money allocated to the *Cassa del Mezzogiorno* for land improvement in the south. In both these countries, however, what is needed is not only a re-allocation of investment, but also an increase in its total if the unemployed are to be put to useful work. In Italy, indeed, the continuously growing population really implies the need for constantly increasing investment, without undue concentration, as may have been the case hitherto, on projects which bring short-term improvements in productivity in particular industries.

Table 55 shows how investment in housing and how total construction activity fared in western European countries. In the majority, there was a steady decline in the number of new houses begun or authorized from the fourth quarter of 1950 onwards; this soon began to be reflected in the indices of dwellings under construction and finally, by the third quarter, in those of numbers of houses completed. It can be assumed that in the countries concerned—those listed in the upper half of the table—completions have still considerably further to fall.

There are varied reasons for the recession in house-building in these countries: in the Netherlands, the cut was deliberately made by the Government as part of its deflationary policy; the Government of Denmark had restricted housing credits in November 1950 for the same reasons, but in August 1951 decided it had gone too far.<sup>3</sup> In Belgium and western Germany, both countries with unemployed resources, the steady downward trend was due to shortage of credit. In western Germany, this shortage was only the indirect result of Government policy, the real value of Government-sponsored credits for house-building remaining constant, while private credits declined.<sup>4</sup> In Sweden, the fall in authorizations and, by the

<sup>2</sup> The high prices charged for natural gas appear, however, to be inhibiting investment by firms in combustion equipment suitable for its use.

<sup>3</sup> The figures, however, still reflect the earlier policy; by the third quarter the number of new houses begun was only one-half of those begun in the third quarter of 1950.

<sup>4</sup> See *Bulletin* for the second quarter of 1951, page 10.

<sup>1</sup> See Chapter 2, section 4, page 48.

**Table 55**  
**CONSTRUCTION OF DWELLINGS AND INDICATORS OF TOTAL BUILDING ACTIVITY**  
*Index numbers—corresponding quarter of previous year = 100*

Country	DWELLINGS										TOTAL BUILDING ACTIVITY <sup>a</sup>				
	1950			1951							1950		1951		
	Fourth quarter			First quarter		Second quarter			Third quarter		Fourth quarter	First quarter	Second quarter	Third quarter	
	Begun or <i>b</i> Under construction	Completed		Begun or <i>b</i> Under construction	Completed	Begun or <i>b</i> Under construction	Completed		Begun or <i>b</i> Under construction	Completed					
Belgium . . . . .	104	..	..	90	..	80	..	42	..	101	..	101	99	96	
Denmark . . . . .	90	112	94	53	98	84	96	55	83	..	106	..	..	..	
Finland . . . . .	74	..	167	55	..	86	..	..	199	..	100	94	108	78	86
Western Germany <sup>c</sup> . . . . .	..	..	..	107	121	234	80	103	77	86	140	116	117	108	99
Netherlands . . . . .	110	135	97	123	137	113	45	104	132	50	80	..	..	..	..
Norway . . . . .	..	80	100	..	65	72	..	81	82	..	118	97	94	92	95
Spain . . . . .	69	..	103	56	..	92	48	..	112	49	..	108	..	..	..
Sweden . . . . .	89	116	117	75	110	100	70	99	118	89	103	108	108	103	102
France . . . . .	107	140	153	173	138	95	165	140	143	157	..	97	105	104	103
Italy . . . . .	127	..	202	106	..	147	117	..	127	135	..	..	..	..	..
Luxembourg . . . . .	123	..	..	152	..	..	100	..	..	133	..	..	..	..	..
Switzerland . . . . .	106	..	138	113	..	97	82	..	134	112	..	104	115	117	116
United Kingdom <sup>d</sup> . . . . .	102	103	101	93	103	92	112	107	98	111	111	103	94	97	98

<sup>a</sup> Sources: See "Notes to the Statistics".

<sup>b</sup> For Finland, Norway, Sweden and Switzerland, the indices relate to employment in the building industry; for other countries, they represent published index numbers relating to the whole of building activity.

<sup>c</sup> Begun for Denmark, Netherlands, Sweden and United Kingdom; authorized for other countries.

<sup>d</sup> The index of building activity is for the U.K./U.S. Zone. The figures for dwellings under construction represent man-hours worked in the construction of dwellings.

<sup>e</sup> Excluding Northern Ireland for dwellings.

third quarter, in completions, appears to run counter to all declarations of Government policy.

Table 55 also shows for a number of countries indicators of total building activity and it seems that, in countries which experienced the downward trend in house-building, total activity was also affected. In all the countries in the upper half of the table for which a total index is available, except Sweden, the index based on the corresponding quarter of the previous year had fallen below 100 by the third quarter. In western Germany, the decline was relatively slight; activity in the commercial field is known to have fallen substantially but this was offset by a rise in military work.

France, Italy, Luxembourg, the United Kingdom and Switzerland provided the exceptions to the general picture of declining construction of dwellings. In Switzerland, the building industry is fully occupied. In the United Kingdom, despite the strain on resources, the Government permitted a small rise in the number of new houses begun, although, as already mentioned, total building activity declined. The new Government is committed not to reduce the housing programme and hopes even to increase the total number of dwellings built by a judicious mixture of dwellings of different sizes. In Italy, the expansion in house-building is still gathering momentum, but in the meantime the construction of new dwellings reached record levels for Italy as a result of measures introduced two years earlier. In France, also, dwellings construction began to rise rapidly from the previously low post-war levels.

The high priority given to housing in some western European countries is in marked contrast to the policy of the eastern European Governments, which continue to concentrate their investment effort on industrialization.<sup>1</sup> In Yugoslavia there was a cut in investment in

1951, mainly concentrated on construction : this may well have permitted resources to be more efficiently used by reducing work in progress and increasing the rate of completion. The relative neglect of investment in agriculture has not yet been remedied, but increased purchases of tractors and other farming machinery are planned for 1952. Elsewhere in eastern Europe, investment appears to have increased in 1951, both absolutely and, probably, as a proportion of national incomes.

#### *The Anti-inflationary Policies pursued by Governments*

There has been no grand strategy of anti-inflationary policy in most countries in Europe and, indeed, it is difficult to see how there could have been. Even in some of the countries whose Governments pursued the most consistently disinflationary and even deflationary policy, there has been an inflationary spiral of prices and wages almost as severe as that in most other countries. Each Government, quite apart from its preoccupation with economic problems affecting particular industries or groups and its general concern not to let the balance-of-payments situation get out of hand, was faced with two interacting but distinct inflationary forces : the pressure on import and export prices from without and the pressure on domestic prices arising from its own decision to increase one particular type of expenditure. As long as adjustments of exchange rates were ruled out, it had in effect to accept the necessity for some rise in prices and to do what it could to prevent this from developing into a cumulative process while at the same time ensuring that it was sufficiently generalized to prevent particular groups of population from reaping an unwarranted gain at the expense of others. Simultaneously, it had to offer differential inducements or impose differential sanctions in order to steer resources into the desired new channels. Only by a complicated system of subsidies to consumers of imports, offset by taxes on exporters or on taxpayers in general could it have hoped to insulate its own price systems from external influences. Only by a rather general system of allocations and direct controls could it have avoided making use of price inducements to bring about the desired shift of resources towards armaments production.

In fact, no western European Government ever contemplated such a system, and the direct controls, export taxes and import subsidies which have been

<sup>1</sup> Thus, in the coalfields of Upper Silesia, the Kosciuszko steel mill, which also produces chemicals derived from coal, and the giant Czesochowa steel mill, started production; the sulphuric acid plant at Wizow (Silesia) started exploiting local anhydrite; rayon factories were opened at Gorzow (Poznan) and Yelenia Gora (Lower Silesia); as was a cement factory at Wierzbica. In Czechoslovakia, the most important developments have been in the industrialization of Slovakia. In Hungary, the steel mill at the new town of Dunapentele started production : when finished, it will use 800,000 tons of coal from the near-by pits and ore from the Ukraine shipped up on the Danube; a large power station based on local low-quality coal has been built at Inota; and, in general, the policy continued to set up medium-heavy industry in country towns away from the main centres already industrialized. In Bulgaria, two new power stations made an important contribution to energy supplies and a large fertilizer factory began to supply agriculture.

used have in general been restricted to particular commodities.

Every Government, however, whatever its political complexion, has made some use of direct controls. Thus, allocation systems for scarce materials, in particular those important for armaments production, and restrictions on their export, have been common. Their effect is to cut off particular demands. Price controls for goods looming large in consumers' budgets have also been general. The permitted prices have usually been fixed by more or less automatic reference to cost and there has been little attempt to squeeze traders' profit margins: in one or two cases, indeed, permitted prices have been raised at a time when consumers' resistance was already driving down the prices actually charged by traders. Rationing of consumers, although it still survives for some commodities in Denmark, Norway and the United Kingdom, has not been extended.<sup>1</sup>

Second, every Government, too, made some use of fiscal policy. The Governments of Belgium, Finland, Norway, Portugal and Sweden introduced export taxes, although not to the full extent of the extra profits earned by exporters nor (except in Belgium, where, however, the rate of tax is very low) over a wide range of products.<sup>2</sup> Certain import duties were remitted in France and Italy in order to keep the cost of living down. Rates of income tax were increased in the spring in Denmark, the Netherlands and the United Kingdom. The Danish Government also imposed compulsory saving on taxpayers, though only on a scale sufficient to yield less than 1 per cent of gross national product. In the Netherlands a lottery loan was floated. In the short term, however, treasuries probably gained more from the effects of inflation than from their own deliberate measures. On the one hand, rises in income, in countries where taxation is progressive, bring more than proportionate rises in tax yields as taxpayers move up to more heavily taxed income brackets; on the other, some incomes directly provided out of public expenditure—the pay of civil servants, social security benefits and interest paid to holders of Government bonds—are stickier than other incomes. Furthermore, the lagging of

armaments production behind schedule meant that in 1951 expenditure was less than had been anticipated.

Third, nearly every central bank was, by the end of the year, applying restrictive measures in the field of credit and monetary policy generally. Soon after the outbreak of the Korean war, rediscount rates had been raised in Belgium, western Germany, the Netherlands and all the Scandinavian countries except Norway. In the Netherlands and Denmark, this was the beginning of a series of upward movements which continued until the middle of 1951, but, in the other countries, the initial increase had more of a once-and-for-all character. The authorities in Austria, France and the United Kingdom, in face of severe and continuing inflationary difficulties, did not raise their bank rates until nearly a year later,<sup>3</sup> by which time, in one of the countries in the first group—Belgium—the rate had already been reduced again. In nearly all western European countries, the long-term rate of interest, as measured by the yield on Government bonds, was also allowed to drift steadily upwards from June 1950 to the autumn of 1951.

Except in western Germany, where the rediscount rate is now 6 per cent and normal commercial borrowing takes place at rates significantly higher still, short rates were not raised sufficiently to have much direct effect on current production and trade, nor were the higher levels of long-term rates such as to have much effect on fixed investment. With an additional exception in Italy, few Governments are now prepared to face the various embarrassments—in particular the increased burden of loan charges on public budgets—which would be implied by a decision to raise interest rates generally to a height great enough to reduce fixed investment or investment in working capital in branches of activity where further price rises are confidently expected. (In the sector of light industry, however, where raw material prices have been weak during the last year, even minor increases in interest rates had much greater effects.) In most countries, the measures taken to restrict directly the total amount of non-Government bank credit outstanding were much more important than the increase in interest rates. In some countries (for example, Belgium), ceilings on total credit were combined with directives to banks as to the types of borrowers who should be given preference or dis-

<sup>1</sup> Except in the case of fuels. See Chapter 2.

<sup>2</sup> The proceeds of these taxes are, in Finland and Portugal to a large extent, and, in Norway to a smaller extent, used to subsidize imports. The Swedish levy is a form of compulsory saving rather than a tax.

<sup>3</sup> France in October 1951, the United Kingdom in November, and Austria in December.



couraged. Other Governments set global ceilings without special directives,<sup>1</sup> while the United Kingdom tightened up existing directives but still set no ceiling.

Precise details of the working of these credit rationing schemes are rarely available, and the importance of the movement of rediscount rates differs from country to country. Thus in Belgium, where strict reserve requirements force the commercial banks to borrow frequently from the central bank, the rise in the rediscount rate certainly implied a general restrictive movement through the medium of the whole complex of controls operated by the *Banque Nationale*.<sup>2</sup> A more complicated example is provided by the United Kingdom, where the rise in the rediscount rate for commercial bills on 7 November 1951 was accompanied by the setting of a special (rediscount) rate for Treasury Bills. This rate is enforced only intermittently and appears to be intended to create such uncertainty as to the price at which commercial banks can reduce their holdings of Government paper

in times of difficulty as to reduce their willingness to expand non-Government credit.

It is extremely hard to assess the effectiveness of these various measures—that is, to measure the extent to which they helped to slow down the rise in prices, improve balances of payments or generally dissipate the inflationary atmosphere—because it is well-nigh impossible to disentangle the effects of credit policy from those of the other deflationary, or quasi-deflationary influences which were operating at the same time. Thus, in Chapter 2, it was shown that a recession in the demand for consumer goods could have been expected to occur for a number of reasons unconnected with monetary policy, although shortage of credit was an important contributory factor. Stocks of textile manufactures rose in most countries because the volume of production had run ahead of demand at existing prices; but, obviously, the existence of these stocks would have had a less depressing effect on markets had credit to finance them been freely available.

In western Germany, where the Government attaches considerable importance to credit policy, the volume of credit, as shown in Table 56, did not rise as much as would have been required to finance

Table 56  
BANK CREDIT<sup>a</sup> GRANTED TO BUSINESS AND INDIVIDUALS  
End of month figures      End 1949 = 100

Country	1950				1951		
	March	June	September	December	March	June	September
Austria <sup>b</sup>	115	128	141	156	174	192	213
Belgium <sup>c</sup>	104	108	116	135	136	132	127
Denmark <sup>d</sup>	102	106	108	107	109	111	111
Finland	105	108	105	111	123	139	129
France	102	108	109	121	127	138	147
Western Germany	116	128	147	170	178	185	202
Italy <sup>e</sup>	100	103	110	121	124	129	..
Netherlands	105	112	111	111	133	138	148
Norway <sup>f</sup>	104	109	110	114	120	127	126
Sweden	104	106	112	114	120	124	125
Switzerland <sup>g</sup>	104	101	106	112	114	116	115
United Kingdom	102	105	103	108	109	118	118

Sources: See "Notes to the Statistics".

<sup>a</sup> Credit granted by Central Bank and other banks unless otherwise specified below.

<sup>b</sup> Credits by others than Central Bank.

<sup>c</sup> Non-Government credits by National Bank and non-Government credits by commercial banks, excluding credits to other banks.

<sup>d</sup> Non-Government credits by National Bank and total of domestic credits

by other banks.

<sup>e</sup> Central Bank credits to business and individuals and all non-Government credits by other banks.

<sup>f</sup> Non-Government credits by Central Bank, credits to business and individuals by other banks.

<sup>g</sup> All domestic credits by Central Bank and non-Government credits by other banks.

easily the rapidly rising value of agricultural and industrial production and external trade. The improvement in western Germany's balance of payments is generally thought to have been due in considerable part to credit restriction and quantitative import controls. But the improvement in the balance of payments can also be ascribed in part to the secular recovery of western German exports and to the cessation of the stock-building of imported commodities which was a major factor in the original crisis. Had it not been for the cautious credit policy, however, excessive home demand would admittedly have slowed down the rise in exports, and the hoarding of certain imports might have continued. In any case the credit policy seems to have hampered the development of production of consumers' goods; although the general index of industrial production in the autumn was a few per cent above the level of the spring, the index of consumers' goods was lower.

In France, on the other hand, there can be little doubt that the relatively expansionary credit policy initiated to ward off a depression in mid-1950, and continued thereafter, in spite of the changed circumstances, for twelve months, was a contributory factor in a major inflation. But, as will be shown below, it is quite impossible to ascribe the French inflation to this factor alone.

In Italy, the Government kept the volume of credit almost constant throughout 1951, and this measure no doubt contributed largely to the relative stability of Italian prices and to the signs of serious deflation which appeared in the autumn months. Bank rate remained unaltered throughout the period, but Italy was one of the exceptional countries where the rate of interest for commercial borrowing was already so high as to have a permanently restrictive effect on the activity of enterprises. But there is a more general explanation of Italian stability: the heavy unemployment restrained wage demands and, combined with the low utilization of the existing stock of capital,<sup>1</sup> made it possible for output per man-hour in 1951 to rise by nearly one-sixth, while real wages rose only a few per cent.

Finally, the very nature of the objectives of credit restriction enhances the difficulties of assessing its "success". If working capital has to be reduced, production and prices are likely to fall. Similarly, if

the supply of credit is cut in face of an upward pressure on prices, prices will rise less or production again will fall. If discriminatory credit controls are applied to particular sectors (as has been attempted in many countries), unemployment can be created in the desired sectors, which may help an expansion desired in others and thus perhaps achieve a planned reallocation of resources. In some countries, however, the intention of credit restriction has been not to create unemployment, but rather to dissipate the atmosphere of bullishness in which the rich are tempted to overspend their incomes, secure in the confidence of future capital gains, and businessmen in general to accumulate inventories. There is considerable scope for reducing propensities to invest and to consume by making it more difficult for bank loans to be negotiated, without necessarily raising interest rates or reducing employment.

Denmark provides the most clear-cut case of the working of credit policy. The volume of credit has hardly changed since September 1950, despite rising prices in nearly all fields. By the second half of 1951, production was falling and unemployment rising in nearly all industries. Cost inflation in the form of rising retail prices and rising wage rates continued throughout the year, thus making a fall in production in the face of a constant supply of credit almost inevitable.

In few other countries is it possible to be dogmatic about cause and effect. All that can be said is that credit policy may have assisted in the general slowing-down of the inflationary rise in prices in the second part of the year, and has almost certainly changed the psychological atmosphere in a large number of cases. Special mention might perhaps be made of the mixed situation in the United Kingdom: for one reason or another, unemployment is rising in the civilian sector but shortage of steel prevents many of the dismissed workers from being re-employed in the armament sector; the cost of living is still rising.

One major field where credit policy has operated drastically has already been described in another context: shortage of credit seems to have been the determining cause in the decline in the number of new houses started in many western European countries. Several Governments found it necessary to attempt to reverse this policy as soon as its full effects became apparent.

<sup>1</sup> See Chapter 2, page 22.

### *Conclusion*

By October 1951, in the countries which began with all factors of production fully employed, the inflation which started with Korea had been brought under control only in Denmark and the Netherlands.

The case of Switzerland is special: the policy of varying the labour supply with business conditions by relaxing or tightening the issue of labour permits to foreign workers has clearly exercised some influence; so has the good response of Swiss consumers and businessmen to Government advice on the timing of buying for stock. This is one of the advantages which a long tradition of stability gives to a Government.

In the other two countries, to what has been said about their credit policies must be added the comment that they both, in the event, increased Government consumption by only fractional proportions of their national incomes and thus made things easier for themselves in a way which will not be possible if they carry out their armaments programmes in 1952. Moreover, in both cases, the attainment of what may now be an equilibrium position has involved rises in retail prices of some 20 per cent in two years and rises in hourly earnings of 17 and 19 per cent.

The relative lack of success of anti-inflationary policies in the remaining countries which began with full employment by no means shows that each particular measure, considered in isolation, was badly conceived. The circumstances of the year were peculiar in that the need to adjust to an exceptional pressure on prices from without coincided with a renewal of domestic inflationary pressure. In the absence of some further abrupt shock to world confidence, it seems quite possible that world prices will not advance further. Should this be so, European Governments will be able to concentrate their attention on combating domestic inflationary pressure. The appropriate weapons for this—a combination of direct controls, restrictions of the total volume of credit, and fiscal policy—are well known. They will, however, be more difficult to apply than they would have been if a mood which takes rapid upward price adjustments for granted had not been created, and if everywhere changes in the distribution of income had not been brought about which are not accepted as permanent by those whose position has worsened. Moreover, the domestic inflationary pressures are

likely actually to be greater in 1952 than hitherto: armament programmes are scheduled to increase and balance-of-payments difficulties are likely to bring a further recrudescence of import restrictions, whose effects will in themselves be inflationary.

It must be added that there has so far been little correspondence between the strength of the "objective" inflationary forces operating on different countries and the degree to which inflation uncoiled itself. The case of France is particularly striking. The import content of French output is only some 15 per cent—less than in western Germany and Italy—as compared with some 25 per cent in the case of the United Kingdom and 40 per cent in the case of Norway. The extra effort devoted to defence in France in 1951 amounted to about  $1\frac{1}{2}$  per cent of gross national product as compared with  $2\frac{1}{2}$  per cent in the United Kingdom. Because activity had been somewhat depressed in the first half of 1950, France was able to increase the national product by some 6 per cent in 1951, as compared with the 2 to 3 per cent which was all that could be achieved in the United Kingdom and Norway. Finally, France devalued its money by only 22 per cent in 1949, as compared with the 30 per cent depreciation of sterling. All the "objective" forces of inflation were thus weaker than elsewhere. Yet French retail prices rose by 33 per cent during the two years after devaluation—that is, by more than in any other western European country except Austria, Finland and Iceland, where there were special factors at work, and by more than twice as much as prices in the United Kingdom. The explanation for this discrepancy between cause and effect must be sought in France's institutional and political framework as moulded by history: every country which has already experienced severe inflation is handicapped in dealing with fresh inflationary strains because its citizens understand too clearly the private importance of acquiring hoards of goods. This thought might well have given pause to those in other countries who put their trust in a supposedly "once-for-all" inflation of income.

With this background of mistrust of the currency, every French Government must therefore have a harder task than its neighbours in holding inflationary pressure in check unless it is prepared to run the risk of actually cutting down activity below the technical maximum. In the long run, improvement in fiscal collection and in the technique of direct control will

be necessary if a lasting confidence is to be restored. In the short run, it may well be that the only choice is between continued inflation and some reduction in the tasks set for industry.

The economies of eastern Europe, in spite of the high degree of centralized control over incomes and prices exercised by their Governments, have also not been able to immunize themselves against inflation, and repeated adjustments of wages and prices, implying a failure of planning, have been made which seem not to be at an end.

In a world dominated by the danger of inflation, it should not be forgotten that there still remain countries which have not yet achieved full employment. In spite of the world boom which gave them opportunities for which the excess capacity in their

engineering industries placed them in a favourable position, Belgium, western Germany and Italy made no inroads whatever into their heavy unemployment.<sup>1</sup> To argue, as is sometimes done, that unemployment in these countries is due to structural difficulties rather than to a generalized lack of demand is merely to state the problem. It was suggested in the SURVEY for 1950 that the problem of absorbing the refugees into the German labour force could not be solved without a purposive and discriminating investment policy and that a lasting solution of the Italian problem would probably imply some control over consumption while the investment necessary to transform Italian agriculture was proceeding.

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<sup>1</sup> See Table XXXII.



## Chapter 5

### ECONOMIC DEVELOPMENTS IN THE SOVIET UNION

#### 1. INTRODUCTION

The present SURVEY, like the *Economic Survey of Europe in 1950*, is mainly concerned with those key problems arising from the competing demands of consumption, investment and armament on the national resources of virtually all countries. In the case of the Soviet Union, consideration of these problems encounters serious difficulty because of the lack of much of the information needed for economic analysis along lines similar to that undertaken for other countries and because of uncertainty as to the precise meaning and method of computation of some of the data which are available. For this reason, Soviet economic developments have been reserved for separate discussion in the present chapter.

In several important respects, however, the information now at hand is somewhat fuller than in other recent years and permits a more detailed analysis than has hitherto been possible. The report on the fulfilment of the fourth Five-year Plan (1946 to 1950) released last April<sup>1</sup> provided a number of key figures, including useful comparisons with pre-war years, and some of the statistical problems encountered in the measurement of the growth in industrial production and national income have been further clarified by recent articles in official Soviet publications relating to the introduction of a new price basis for these calculations. With respect to developments during 1951, the main source of information is the October Revolution speech on 6 November by Mr. Beria, a Deputy President of the Council of Ministers, giving provisional estimates for the year as a whole.<sup>2</sup> It is

still too early to have available for purposes of the present study the two principal economic documents issued after the close of each year, the annual report on plan fulfilment, published at the end of January, and the report on the State budget, usually presented in March. Current developments will also be easier to interpret, particularly in relation to the major objectives for the next several years, when the new Five-year Plan for the period 1951 to 1955 is announced.<sup>3</sup>

Apart from statistics, there is a considerable flow of other material of a more descriptive character. Some of this material relates to the general progress of mechanization and technology in the economy and to the achievements of individual factories or industrial trusts, and much of it is devoted to major construction works, such as the Volga-Don and the Turkmen canals, the hydro-electric projects on the Don, Dnieper and Volga Rivers and the irrigation schemes connected with them.<sup>4</sup> These reports serve to confirm the general impression of rapidly expanding production and to illuminate the great efforts made to broaden and strengthen the structure of the Soviet economy as well as some of its basic problems. For purposes of economic analysis, however, this type of material, although drawn upon in the following sections, is not easy to employ without more information of an economic rather than technical character and without more comprehensive data making it possible to relate these particular developments to the economy as a whole.

<sup>1</sup> See *Izvestia*, 17 April 1951.

<sup>2</sup> The usual quarterly reports on plan fulfilment have been greatly reduced in length and content since the beginning of 1951 and now provide little more than a statement of the percentage fulfilment, by the different economic ministries, of targets the size of which has not been announced. In addition to this information, the quarterly reports previously contained

data on the percentage increases (over the corresponding quarter of the preceding year) in the output of around seventy industrial products and also contained sections giving summary data on transport, capital construction, productivity, and the labour force.

<sup>3</sup> Statements in the Soviet Press indicate that the Plan is in operation, although details have not yet been released.

<sup>4</sup> These projects are discussed at greater length below.

## 2. INDUSTRIAL PRODUCTION

### Relative Increase during 1951

Industrial production in the Soviet Union in 1951 was estimated in Mr. Beria's speech of 6 November as more than 15 per cent greater than in 1950 and about twice as great as in 1940. These increases, in conjunction with data announced for earlier years, give the following series :

Year	Gross value of industrial production (Billion roubles at "1926/27 prices")	Index numbers (1940=100)
1937	95.5	69
1940	138.5	100
1946	106.0	77
1947	128.8	93
1948	163.0	118
1949	194.8	141
1950	239.6	173
1951	<sup>a</sup>	199 <sup>a</sup>

<sup>a</sup> The "gross value" for 1951 obtained by application of the announced 15 per cent increase would be 275.5 billion roubles, a rise of 35.9 billion roubles compared with an increase of 44.8 billions in 1950. As explained below, however, Soviet sources indicate that the calculations of industrial output since 1950 are no longer made on the basis of "1926/27 prices", and these comparisons would thus not be valid.

The expansion in industrial output in 1951 was very rapid by almost any standard of comparison and, in absolute terms, was doubtless at least as great as in any previous year since the beginning of large-scale industrial development in the Soviet Union. The relative increase was, however, considerably smaller than the rates of growth announced for each of the preceding years during the period of the fourth Five-year Plan, as may be seen from the figures on gross industrial production in Table 57.

Part of this difference may represent an inevitable slowing down after the rapid recovery of production from the ravages of the war and its rise far above pre-war levels. Such a deceleration may also be seen in the rates of increase from year to year in the output of the basic industries with the exception of electric power, even though the absolute increases were larger than in other years (Tables 57 and 58).

The greater part of the change in the rate of growth in 1951 compared with corresponding data for other years is probably attributable, however, to the dropping of the antiquated "1926/27 prices" hitherto employed and the introduction of a new and more balanced pricing system in the valuation of industrial production. The nature of this problem can best be

Table 57

### INDICES OF INDUSTRIAL PRODUCTION, TOTAL AND BASIC INDUSTRIES

Industry	1947	1948	1949	1950	1951	1951 (1940=100)
	(Previous year = 100)					
Gross industrial production . .	122	127	120	123	115	199
Basic industries :						
Coal and lignite	112	114	113	111	109	171
Crude petroleum	119	113	114	113	112	136
Electric power .	115	116	118	116	116	216
Pig-iron . . .	114	122	119	117	114	147
Crude steel . .	109	128	125	117	114	169
Rolled steel products . .	115	128	127	116	114	182

Sources : Reports on plan fulfilment, and L. Beria's speech of 6 November 1951.

seen after examination of available data on the structure of industrial production.

### Capital Goods and Consumer Goods

The information which can be brought together on the production of individual commodities in physical terms is given in Table 58. The table also includes a considerable number of items for which only the target figures for 1950, but not the actual production figures for any post-war years, are known. It will be noted that the estimates which can be made of output in physical quantities in 1951 are confined at this stage almost entirely to the basic industries, but even for earlier years the selection of end-products is very limited.

The data on individual commodities nevertheless show that heavy industry has grown enormously during the post-war years, following the emphasis it had already received in the pre-war five-year plans, while the consumer goods covered by the table have increased more moderately.

In addition to the data for individual commodities shown in Table 58, the output of the engineering industries as a whole increased by 130 per cent from 1940 to 1950, according to the report on the Five-year Plan, and by a further 21 per cent in 1951. With respect to consumer goods, on the other hand, production of the branches under the Ministry of Light



<b>Motor cycles</b>	Thousands	351 <sup>e</sup>	..	..	..	..	..	135	..	..
<b>Bicycles</b>	Thousands	..	..	..	..	..	..	1,050	..	f
<b>Shot guns</b>	Thousands	..	..	..	..	..	..	350	..	..
<b>Cameras</b>	Thousands	..	..	..	..	..	..	530	..	f
<b>Chemicals and related products</b>										
<b>Caustic soda</b>	Thousands tons	..	..	..	..	..	..	390	..	..
<b>Calcined soda</b>	Thousands tons	517	..	..	..	..	..	800	..	..
<b>Mineral fertilizers</b>	Thousands tons	..	2,608	..	..	..	..	5,100	5,100	..
<b>Synthetic dyes</b>	Thousands tons	35 <sup>a</sup>	35	21.9	31.5	42.5	47.6	43	51.8	..
<b>Soap</b>	Thousands tons	495	747	245	314	456	775	870	866	..
<b>Building materials</b>										
<b>Cement</b>	Million tons	5.5	5.8	3.3	4.6	6.4	8.1	10.5	10.3	12.3
<b>Slate</b>	Million sheets	186.9	205	140	200	270	370	410	440	..
<b>Window glass</b>	Million sq. metres	60 <sup>a</sup>	44.4	46.7	55.6	66.8	79.5	80.0	84.3	..
<b>Timber and paper</b>										
<b>Haulage of timber</b>	Million cubic metres	201.5	..	..	..	..	..	280	..	..
<b>Haulage of industrial timber</b>	Million cubic metres	111.3	119	80	101	134	154	190	162	..
<b>Sawn timber</b>	Million cubic metres	28.8	..	10.7	12.8	21.6	..	39	..	..
<b>Paper</b>	Thousand tons	831	812	556	696	836	995	1,340	1,194	..
<b>Textiles and other products of light industry</b>										
<b>Cotton fabrics</b>	Million metres	3,442	3,886	1,878	2,498	3,098	3,532	4,686	3,815	..
<b>Woollen fabrics</b>	Million metres	105	120	79	106	136	162	159.4	167	..
<b>Silk fabrics</b>	Million metres	57.9	69.5	..	..	80	102	141	125	..
<b>Leather shoes</b>	Million pairs	164	205	78	109	135	165	240	205	..
<b>Rubber shoes</b>	Million pairs	84.6	68	..	..	..	..	88.6	..	..
<b>Socks and stockings</b>	Million pairs	401	..	..	..	..	..	580	..	..
<b>Utensils<sup>i</sup></b>	Millions	..	..	..	..	..	..	260	..	..
<b>Samovars</b>	Thousands	..	..	..	..	..	..	200	..	..
<b>Tumblers</b>	Millions	..	..	..	..	..	..	160	..	..
<b>Matches</b>	Billion boxes	7.1	..	2.4	3.3	5.3	..	9.9	..	..
<b>Food</b>										
<b>Butter</b>	Thousand tons	185	207	185	208	285	303	275	325	351
<b>Vegetable oil</b>	Thousand tons	495	724	312	387	515	680	880	775	1,046
<b>Fish<sup>j</sup></b>	Million tons	1.6	1.4	1.1	1.5	1.5	1.8	2.2	1.8	1.9
<b>Meat</b>	Thousand tons	797.2	..	..	..	..	..	1,300	..	f
<b>Flour</b>	Million tons	15	..	..	..	..	..	19	..	..
<b>Alcohol</b>	Million litres	763	..	..	..	..	..	1,008	..	..
<b>Sugar</b>	Thousand tons	2,421	2,150	465	978	1,663	2,045	2,400	2,515	3,118

Sources: See *Economic Survey of Europe in 1950*, Appendix B, pages 228-229, and "Notes to the Statistics" in this Survey.

<sup>a</sup> 1938.

<sup>b</sup> Including motor-buses.

<sup>c</sup> Data relate only to deliveries to agriculture.

<sup>d</sup> For cereals only.

<sup>e</sup> Output of enterprises of the People's Commissariat for General Engineering only.

<sup>f</sup> Percentage increase in sales from 1950 to 1951 is given in L. Beria's speech of 6 November 1951 as follows: clocks and watches 11, sewing machines 28, radio sets 25, bicycles 100, cameras 39, meat 20.

<sup>g</sup> Watches only.

<sup>h</sup> Valve radio receivers only.

<sup>i</sup> Aluminium, enamelled, porcelain and chinaware utensils.

<sup>j</sup> Catch.



Industry (dealing largely with textiles, footwear and household goods) is reported to have risen by only 17 per cent from 1940 to 1950.<sup>1</sup> For 1951, Mr. Beria has reported that the output of consumer goods was steadily rising owing to the successful development of industrial production and the growth of agricultural raw materials, and cited substantial rates of increase in current deliveries of various manufactured products to the population.<sup>2</sup>

The data mentioned above, in conjunction with more detailed information for pre-war years, provide an indication of the changing structure of Soviet industrial production, especially the steadily increasing importance of the engineering and metal-working branches (Table 59). Comparisons between different industries for the same year or between different years for the same industry are, however, subject to two qualifications which must be borne in mind. The first is that output in each branch is computed on a gross basis—viz., the summation of the outputs of all factories, no deduction being made for inter-factory sales of materials and semi-manufactures—with the result that the relative contribution of the higher stages of fabrication, such as engineering, tends to be overstated in relation to that of the basic industries. The second and more important qualification arises because of serious problems of valuation, discussed below, which have influenced substantially the estimated size of certain industries compared with others, as well as their rates of growth and the general level of the index of production.

#### *Level and Rate of Growth of Production*

In facing the problem of measuring the growth of industrial production, the Soviet authorities have experienced two particular difficulties. First, the very breadth and rapidity of industrial development made it necessary to introduce into the calculation of the index, initially established on the basis of prices ruling in 1926/27, a widening stream of new products, and hence the problem arose of assigning values to those goods produced under cost conditions very

different from those prevailing in the base period. Second, there was the difficulty, probably of less importance in its effect on the index than the first, that (even among the commodities already produced in the base period) prices necessarily reflected the relative values prevailing in what was then still an industrially undeveloped country: prices would therefore tend to be relatively high for goods the production of which was small but destined to increase relatively rapidly as industrialization gathered momentum. Both of these problems are, of course, present in any circumstances and in all countries, whatever the method of calculation of industrial production indices.<sup>3</sup> But in the Soviet Union they raised exceptionally serious difficulties because of the speed of industrial development and the fact that it was accompanied, over a considerable part of the period, by substantial increases in the general level of prices.

The valuation problem received the serious attention of Soviet statisticians long before the war as well as since,<sup>4</sup> but was never satisfactorily solved until the old price basis was finally replaced by a new one. In the words of one Soviet authority,<sup>5</sup> writing after the war, "constant prices" became in practice "largely conventional".<sup>6</sup> Taking the machinery industry as an example, he pointed out that the weight of new production is extremely heavy and that, in most cases, the prices employed for purposes of the calculation were little different from the actual prices prevailing in recent years. Although the problem was doubtless most serious in the rapidly growing machinery and engineering industry, it arose in all branches where new products or significant changes in old products were made: for instance, in chemicals, alloy steels and vitamin foods.

<sup>3</sup> For example, the index of industrial production (excluding building) for the United Kingdom for the year 1950 shows an increase since 1938 of 49½ per cent when the link between pre-war and 1946 is calculated on pre-war weights, and of 41 per cent when 1946 weights are used throughout.

<sup>4</sup> Especially A. I. Rotshtein, *Problemy promyshlennoi statistiki S.S.S.R.*, Vol. I, Leningrad, 1936, pages 241-252, and Vol. III, Moscow, 1947, pages 60 ff.; S. V. Marshev, *Neftyanoe Khozyaistvo*, No. 12, 1948; *Planovoe Khozyaistvo*, No. 10, 1938, pages 57 ff.

<sup>5</sup> Ya. Ioffe, *Planirovanie promyshlennogo proizvodstva*, Moscow, 1948, page 92.

<sup>6</sup> The difficulty was not that the prices used for individual output items were not "constant" or "fixed", as designated in official sources, but that, in the case of newly produced goods, the prices, when fixed, tended to reflect current rather than 1926/27 cost conditions.

<sup>1</sup> See report on the fulfilment of the Fourth Five-year Plan (17 April 1951). The higher rates of increase reported for some of the food products—notably butter, sausage products and tinned goods—must be presumed to refer in part to shifts from home to factory production since, as indicated below, there is little indication of substantial increases in the actual output of the basic commodities for these industries.

<sup>2</sup> Being expressed only in terms of the relative increase from 1950 to 1951, these data cannot be given in absolute terms but are shown, as percentages, in the footnotes to Table 58.

Although details of the "1926/27 prices" used in the computation of the index as well as actual price quotations for industrial products in recent years are lacking, enough information is available on the

general development of prices to illustrate the importance of the problem. Thus, it may be roughly estimated that the prices of manufactured foodstuffs shortly before the war averaged six to eight times and,

**Table 59**  
**VALUATION AT "1926/27 PRICES" <sup>a</sup> OF GROSS INDUSTRIAL OUTPUT**  
**BY PRINCIPAL PEOPLES' COMMISSARIATS OR MINISTRIES**

*Billions of roubles*

People's Commissariat or Ministry <sup>b</sup> for	LARGE-SCALE INDUSTRY ONLY <sup>c</sup>			ALL INDUSTRY	
	1937 <sup>d</sup>	1938 <sup>d</sup>	1939 <sup>d</sup>	1940 <sup>e</sup>	1950 <sup>e</sup>
<i>Basic industries</i>					
Coal industry . . . . .	4.7	1.9	2.1	2.3	3.6
Oil industry . . . . .		2.8	3.0	3.0	3.7
Electric power . . . . .	3.4 <sup>f</sup>	3.8 <sup>f</sup>	4.1 <sup>f</sup>	1.9	3.6
Iron and steel industry . . . . .	5.1	5.3	5.5	5.9	8.6
Non-ferrous metals industry . . . . .	1.4	1.4	1.6	1.8	2.8
<i>Engineering and metal-working industries</i>					
Armaments . . . . .	20.0	11.6	16.9	50.2	115.5
Heavy engineering . . . . .		2.4	2.7		
Medium engineering . . . . .		6.1	7.0		
General engineering and metal-working industries . . . . .		2.1	2.3		
Electrical engineering . . . . .	<sup>f</sup>	<sup>f</sup>	<sup>f</sup>		
<i>Light and food industries</i>					
Textiles industry . . . . .	8.5	9.1	9.9	47.1	..
Light industry . . . . .	6.7	7.1	7.7		
Fishing industry . . . . .	0.8	0.8	0.9		
Food industry . . . . .	9.1	10.3	11.3		
Meat and dairy products industry . . . . .	2.9	3.8	4.3		
Procurement <sup>h</sup> . . . . .	2.0	2.1	2.4		
<i>Other industries</i>					
Chemical industry . . . . .	3.4	3.9	4.3	26.3	..
Building materials industry . . . . .	0.9	1.5	1.6		
Timber industry . . . . .	3.0	2.8	3.0		
Producers' co-operatives <sup>i</sup> . . . . .	13.2	15.0	18.2	<sup>j</sup>	<sup>j</sup>
Republican, local and other industry . . . . .	5.1	5.3	5.8	<sup>j</sup>	<sup>j</sup>
Total—large-scale industry : . . . .	90.2	99.1	114.6	<sup>k</sup>	<sup>k</sup>
Production goods . . . . .	53.3	..	..	<sup>k</sup>	<sup>k</sup>
Consumption goods . . . . .	36.9	..	..	<sup>k</sup>	<sup>k</sup>
Total—all industry : . . . . .	95.5	..	123.8	138.5	239.6
Production goods . . . . .	55.2	..	73.7	84.8	..
Consumption goods . . . . .	40.3	..	50.1	53.7	..

<sup>a</sup> Sources: Officially reported details for 1938 and 1939 supplemented by less comprehensive data and percentage changes for other years; see "Notes to the Statistics".

<sup>b</sup> The significance of these prices and their influence on the output series is discussed in the text.

<sup>c</sup> The value of production by Ministries (formerly Commissariats) includes the output of certain ancillary activities as well as that of the principal products—e.g., domestic house construction for workers under the Coal Ministry and others, and peat production by the Ministry of Electric Power.

<sup>d</sup> Includes (1) all principal enterprises of industrial Ministries, regardless of their labour force and motive power and (2) enterprises of an auxiliary or local nature employing more than 30 workers or, if motive power is used, more than 15 workers.

<sup>e</sup> Pre-war territory.

<sup>f</sup> Post-war territory.

<sup>g</sup> Electrical engineering production included under "Electric power", the two branches being under the same Commissariat until 1940, but since separated into different Ministries.

<sup>h</sup> Value for all engineering and metal-working industry.

<sup>i</sup> Including mainly milling industries.

<sup>j</sup> 1932 prices.

<sup>k</sup> Not separately distinguished.

<sup>l</sup> Total output of large-scale industries is separately reported at 129.5 billions of roubles in 1940; no post-war data are available on this basis.

in 1950, ten to fifteen times the "1926/27" prices at which they would have been entered into the computation of the index of production. Similarly, prices of textiles and other consumer goods were about four times and, in 1950, about six times the 1926/27 level.<sup>1</sup> The prices of basic industrial materials, including coal, petroleum, iron and steel, non-ferrous metals and timber have also risen substantially over the period. The rate of innovation in the industries producing these consumer goods and basic materials was, however, relatively low, and as long as they continued to be valued, on the average, at or near the prices ruling in 1926/27, their importance became progressively under-stated in relation to engineering and other new products valued, as noted above, nearer to current price levels.

In other words, the computed value of production in engineering and other rapidly expanding industries has been heavily affected by the rise in prices since 1926/27, and these industries have thereby acquired a heavy weight compared with other more slowly developing branches in the computation of the gross value of production at "1926/27 prices". It follows also that these factors have continued to influence the index of production during the post-war period, even though prices have been stable or falling during the last several years. This is so both because production has continued to expand most rapidly in those branches whose weight had become relatively heavy by virtue of the conventional set of price relationships that had developed and because, since the war, still more new products have been added under cost conditions different from those prevailing in 1926/27.

Correction of these difficulties has perhaps given rise to greater difficulty than would ordinarily be encountered in other countries in making a basic revision of an index of industrial production, since in the Soviet Union the "1926/27 prices" have served not merely as the basis for computing the gross value of industrial production (as well as the national income at fixed prices) but also, until 1949, as the basis for planning and for control of plan fulfilment. Since 1949, however, current wholesale prices have been used for the purpose of planning industrial production, although along with the new price basis

the computation of industrial production at "1926/27 prices" was temporarily continued through 1950 for the purpose of comparing the results attained with the goals originally set under the fourth Five-year Plan ending in that year. Thereafter, official Soviet sources indicate that the old price basis has been dropped altogether and that the results for 1951 compared with 1950 are computed on the basis of current wholesale prices.<sup>2</sup> This change can probably be regarded as the main reason for the marked decrease in the rate of growth from 1950 to 1951 compared with earlier years, since the adoption of current wholesale prices would greatly reduce the weight given to engineering and other goods which have made their appearance in Soviet production since 1926/27.

The recomputation of the index of industrial production has not yet been carried back to earlier years, however, and it is impossible at present to state how much the current level of production in relation to pre-war would be reduced, compared with the results given on the basis of "1926/27 prices", if such a recomputation were made. Certainly the increase from pre-war years to the present would remain exceptionally great, particularly when account is taken of the heavy damages to Soviet industrial capacity during the war. A very rough impression of the increases in industrial output can be obtained by comparing pre-war and current levels of output of basic industrial materials, particularly coal and lignite,<sup>3</sup> petroleum, electric power, iron and steel, non-ferrous metals, timber and other building materials, and cotton and other industrial crops (Tables 58 and 61). In the absence of a revised index extending back to the pre-war period, however, it is difficult to obtain a balanced impression from these separate data on basic materials or, with respect to the advanced stages of fabrication, to know the relative importance of the more rapidly rising equipment goods industries compared with the more slowly increasing consumer goods branches.

<sup>2</sup> See the addendum to the chapter giving extracts from two recent articles in official Soviet journals, from which the foregoing information is drawn.

<sup>3</sup> In considering the increase in the output of coal and lignite, allowance must be made for the increased share of the latter in the total. If expressed in terms of calorific value, the increase from 1940 to 1950 would be roughly 10 percentage points less than when measured, as in Tables 57 and 58) on a ton-for-ton basis.

<sup>1</sup> The relatively great increase in the prices of consumer goods after 1926/27 reflects in part the heavy incidence of turnover taxes (introduced on a large scale in 1930) on which more details are given in section 5 below.

### 3. CONSTRUCTION AND HOUSING

The Soviet authorities have placed great emphasis in recent years on construction activity with respect both to large construction projects and to housing development. A major difficulty has been that, as stated in the report on fulfilment of the fourth Five-year Plan, the "output of building materials and their quality still lagged behind the growing requirements of the national economy".<sup>1</sup> The production of building materials has nevertheless increased substantially compared with pre-war. The data given in Table 58 show that, compared with 1940, the output of cement in 1950 had increased by 80 per cent, that of window glass by 90 per cent, and that of slate by 115 per cent, while that of the timber industry—the subject of severe criticism in recent years—had risen by 36 per cent. In 1951, a further increase of 20 per cent in cement production was registered. No other data on the output of building materials in 1951 have been released, but plan fulfilment percentages through the first three quarters show that the timber industry is continuing to lag behind schedule.<sup>2</sup>

#### Major Construction Projects

The various major construction works now under way are expected to make a substantial contribution to the productive resources of the national economy,

<sup>1</sup> *Izvestia*, 17 April 1951.

<sup>2</sup> The quarterly reports show the following percentage fulfilments (the planned amounts, however, not being stated):

Ministry	First quarter	Second quarter	Third quarter
Building materials industry	99	103	102
Timber industry . . . . .	89	98	90

particularly in power production, inland water transportation, irrigation, and total arable area. For example, it is estimated that the new hydro-electric power stations on the Volga, Don and Dnieper Rivers will raise electric power output by some 22.5 billion kWh per year, or more than one-fifth of the current level. The salient features of the major development schemes are summarized in Table 60.

In his speech of 6 November 1951, Mr. Beria expressed assurance that the progress achieved on these projects during the year would be even greater than had been contemplated under the plan. Reports from the Volga-Don canal site indicated that the major civil engineering work was virtually complete,<sup>3</sup> and both the canal and the hydro-electric station at Tsimlyansk are expected to be in operation by the spring of 1952.

Execution of these giant undertakings places extremely heavy demands on manpower resources and on the steel, cement and heavy electrical engineering industries in particular, and they appear to have been given priority over various other projects of somewhat more modest dimensions which compete for the same resources.<sup>4</sup>

<sup>3</sup> In September the last sluice for the 13 locks on the canal was assembled and the River Don diverted through a new cut for the hydro-electric station at Tsimlyansk, the main work on the Tsimlyansk dam was completed in December and reports indicate that construction of the generating equipment is well in hand.

<sup>4</sup> For example, the following major projects have been under construction during the latter part of the fourth Five-year Plan, but such reports as are published show only moderate activity at the sites (projected output in million kWh): Baikal (3,710), Vasilevo (1,500), Ust Kamenogorsk (1,460) and Molotov (1,300).

Table 60  
MAJOR PROJECTS UNDER CONSTRUCTION IN THE SOVIET UNION

Principal features	Tsimlyansk (Don)	Kuibyshev (Volga)	Stalingrad (Volga)	Kakhovka (Dnieper)	Turkmen Canal
To be operating by	1952	1955	1956	1956	1957
Power capacity (thousand kW) . . . . .	160	2,000	1,700	250	100
Annual power output (million kWh) . . . . .	750	10,000	10,000	1,200	500
Irrigation area (million hectares) . . . . .	0.7	1.0	1.5	1.5	1.3
Water supply area (million hectares) . . . . .	2.0	—	11.5	1.7	7.0
Concrete to be laid (million cubic metres) . . . . .	..	6.0	7.0	2.0	1.5
Earth excavation (million cubic metres) . . . . .	..	150	100	20	250-300

Sources: *Elektrichestvo*, *Kalendar-Spravochnik na 1951 god*, Moscow, 1951, page 17, and *Soviet Weekly* (Soviet Embassy, London), 8 November 1951.



### The Housing Problem

The concentration of productive resources on industrial development under the pre-war Five-year Plans necessarily entailed heavy sacrifices for consumption, including the standard of housing. The problem was aggravated by the fact that industrial growth brought with it a strong migration from the countryside to the cities. The extent of overcrowding in the cities is indicated by the fact that, in 1939, urban dwelling-space averaged only about 5 square metres per person, or about one-third to one-fifth as much as in most western European countries.<sup>1</sup> During the war, housing received a tremendous setback, both through the curtailment of construction and through extensive war damage. Official estimates placed the war-time destruction at 1.2 million out of a total of slightly less than 2.6 million urban dwelling-units in the devastated areas and 3.5 million out of a total of 12 million rural houses; it was further estimated that urban areas required 60 million square metres of living space for rehabilitation.<sup>2</sup>

The fourth Five-year Plan consequently differed from its predecessors in providing for an extensive house-building programme; repairs and construction of urban dwellings during the period 1946 to 1950 amounted to about 100 million square metres, or considerably more than the Plan figure of 84.4 millions, although in the rural areas the construction of 2.7 million houses was about one-fifth less than the objective set for the period. In 1951, according

<sup>1</sup> See 1949 SURVEY, pages 31 and 247.

<sup>2</sup> N. Voznesensky, *Voennaya ekonomika S.S.S.R.*, Moscow, 1947, pages 161 and 165.

to the provisional totals quoted by Mr. Beria, urban construction was further developed, but rural housing continued to lag behind schedule; completions during the year were about the same in both categories as in 1950 and smaller than they had been in 1948.

#### Housing Repairs and New Construction (Annual totals)

Year	Urban dwellings (million square metres)	Rural houses (millions)
1946 . . . . .	6	..
1947 . . . . .	13	0.4
1948 . . . . .	32	1.2
1949 . . . . .	21	0.7
1950 . . . . .	28	0.4
1951 . . . . .	27	0.4

War-time losses (but not the ten years' obsolescence in the remaining stock of houses for the country as a whole) have thus been more than made good for the urban areas and have been met to the extent of nearly 90 per cent in the countryside. In the meantime, however, the total population of the country, on a comparable territorial basis, has risen by about 5 per cent from 1940 to the end of 1951, and that in urban areas probably by as much as 30 per cent.<sup>3</sup>

<sup>3</sup> The total population at the beginning of 1940 has been estimated at about 196 millions, including all territories under Soviet administration in August of that year. (See *The Population of the Soviet Union* by Frank Lorimer, League of Nations, 1946, page 186.) The population at the end of 1951 may be roughly estimated at 206 millions, based on the number of electors to the Supreme Soviet in 1950 and the annual increase quoted by Mr. Beria in his speech of 6 November 1951. The increase in urban population (55.9 millions in 1939, in the pre-war territory, according to *Sotsialisticheskoe Stroitelstvo Soyuz S.S.R.*, Moscow 1939, page 9) is roughly estimated on the basis of the announced increase in the total number of workers in the "national economy" after allowance for non-urban workers.

### 4. AGRICULTURAL PRODUCTION <sup>4</sup>

Soviet agriculture presents a contrast to the large increases scheduled and the still greater increases achieved in industrial production under the fourth Five-year Plan. Agriculture suffered serious losses during the war,<sup>5</sup> and the target for the gross value of

agricultural output in 1950—29.5 billion roubles at "1926/27 prices"—was slightly less than the goal, covering a 10 per cent smaller agricultural territory, which had been set for 1942 under the third Five-year Plan, although 27 per cent greater than the actual 1940 output on a comparable territorial basis. Actual production in 1950 fell considerably short of the objective.

As may be seen in Table 61, the total sown area of the Soviet Union in 1950, some 146 million hectares, was not as large as that originally envisaged in the

<sup>4</sup> For further details on Soviet agricultural production, see the article "Long-term Trends in European Agriculture" in the *Economic Bulletin for Europe*, Vol. 3, No. 2.

<sup>5</sup> Voznesensky (*Voennaya ekonomika S.S.S.R.*, Moscow 1947, page 160) quotes such losses in the occupied areas as 7 million out of 11.6 million horses, 17 million out of 31 million cattle, 27 million out of 43 million sheep and goats, 137,000 tractors and 49,000 combine harvesters.

Table 61

INDICATORS OF AGRICULTURAL PRODUCTION IN THE SOVIET UNION

Commodity	Unit	1937 actual <sup>a</sup>	1940 actual <sup>b</sup>	1942 plan <sup>a</sup>	1950 plan <sup>b</sup>	1950 actual <sup>b</sup>
Gross value of agricultural production	Billions of roubles at "1926/27 prices"	20.1	23.3	30.5	29.5	25.0 <sup>c</sup>
Crop production						
Grains . . . . .	Million tons	120.3	118.8	132.7	127.0	124.5
Cotton . . . . .		2.58	2.7	3.29	3.1	3.75
Sunflower seed . . . . .		2.08	3.3	2.83	3.7	..
Sugar beet . . . . .		21.86	21.0	30.0	26.0	23.5
Potatoes . . . . .		65.63	..	100.0	..	..
Total sown area . . . . .		135.3	151.1	147.4	158.5	146
Grains . . . . .	Million hectares	104.4	111.1	102.0	105.8	102.5
Fodder crops . . . . .		10.6	18.1	23.6	28.3	21
Industrial crops . . . . .		11.2	11.8	11.5	11.8	..
Potatoes and vegetables		9.0	10.1	10.3	12.6	11.0
Livestock numbers <sup>d</sup>						
Cattle . . . . .	Million head	54.1 <sup>b</sup>	54.5	71.5	65.3	57.2
Pigs . . . . .		29.3 <sup>b</sup>	27.5	51.5	31.2	24.1
Sheep and goats . . . . .		72.2 <sup>b</sup>	91.6	140.0	121.5	99.0
Horses . . . . .		18.8 <sup>b</sup>	20.5	22.0	15.3	13.7

Sources: See "Notes to the Statistics".

<sup>a</sup> Pre-war territory.

<sup>b</sup> Post-war territory.

<sup>c</sup> Total not announced; estimate based on Table 62.

<sup>d</sup> Total livestock (collective, State and private ownership); end-of-year census.

Plan for that year (158 million hectares) and still failed to reach that target by 1951, when an increase of 6 million hectares brought the sown area to about the 1940 level (on a comparable territorial basis). Two-thirds of the increase in 1951 was in the area sown to wheat; it thus appears that the programme for expanding the area under grass and other feed crops—already 7 million hectares short in 1950 of the 28-million goal for that year—continued to lag.

<sup>1</sup> Because of this basis of estimate without further information on harvesting losses, data on Soviet crops are not directly comparable with corresponding data for most other countries (see "Note on Harvest Estimates in the Soviet Union", *Economic Bulletin for Europe*, Vol. 3, No. 2, pages 47-48). It may also be noted that the Deputy Minister of Agriculture, P. Lobanov, stated last spring that the successes which had been achieved in agriculture would have been "immeasurably greater if serious errors had not been made in crop production and, above all, if there had not been great losses in harvesting" (*Pravda*, 8 May 1951). The same point was made in the report on the fourth Five-year Plan, which stated that "losses which are still large in harvesting, especially in grain, flax and sugar beet, are a serious shortcoming in agricultural production" (*Izvestia*, 17 April 1951).

This programme is currently receiving the greatest emphasis as the necessary basis for increasing livestock production.

The gross harvest of grain computed on a standing crop basis <sup>1</sup> in 1950 was 124.5 million tons, compared with a target of 127 million tons for that year and an actual production of 119 million tons in 1940. The 1951 crop may have been of about the same general order of magnitude as in 1950.<sup>2</sup>

Little information is available on other food crops in 1950 save that the total crop of potatoes was 21 per cent greater than in 1940 <sup>3</sup> and that the sugar beet crop failed to reach its target. Among the industrial crops, the output of cotton in 1950 was 650,000 tons above the planned level and 1,000,000 tons greater

<sup>2</sup> Mr. Beria's speech of 6 November stated only that "for several years past the gross annual grain crop has exceeded 7 billion poods" (115 million tons).

<sup>3</sup> No figure on actual output in either of these years is, however, available.

Table 62

ESTIMATED INCREASE FROM 1940 TO 1950 IN GROSS AGRICULTURAL PRODUCTION  
IN THE SOVIET UNION

Product	Gross value of production at " 1926/27 prices " <sup>a</sup>				Index numbers of gross production in 1950 <sup>b</sup> 1940 = 100
	1937 actual		1942 plan		
	Billions of roubles	Percentage distribution	Billions of roubles	Percentage distribution	
Grains . . . . .	6.35	31.6	7.20	23.6	105
Industrial crops . . . . .	1.75	8.7	3.00	9.8	120
Fodder crops . . . . .	1.78	8.8	2.97	9.8	115
Potatoes and vegetables . . . . .	2.95	14.7	4.40	14.4	110
Livestock . . . . .	5.05	25.1	9.90	32.5	100
Other . . . . .	2.24	11.1	3.03	9.9	110
Total . . . . .	20.12	100.0	30.50	100.0	107 <sup>c</sup>

<sup>a</sup> From *Tretii pyatiletnii plan razvitiya narodnogo khozyaystva S.S.S.R.* (Draft of the Third Five-year Plan for the Development of the National Economy of the U.S.S.R.), 1938-1942, Moscow, 1939.

<sup>b</sup> Estimated on basis of data given in Table 61.

<sup>c</sup> The same result is obtained whether 1937 weights or 1942 (plan) weights are used (107.1 in the first case and 107.0 in the second).

than in 1940.<sup>1</sup> On these other crops, Mr. Beria's provisional report for 1951 was limited to the statement that "we shall gather more sugar-beet and cotton this year than last year".

Animal husbandry, in which war-time losses were particularly severe, appears to have offered the most serious difficulties, along with the expansion of the fodder supply, in meeting the objectives of the agricultural programme. The goals set for the increase in livestock by 1950 were not attained, and no data have since been published on the growth of the livestock population in the country as a whole.<sup>2</sup> As far as may be judged by livestock numbers, it appears that the output of livestock produce during 1950 must have been no higher than before the war and, con-

sidering the further increases in the population, somewhat smaller on a *per capita* basis.

No official statement has been made of the over-all results achieved by Soviet agriculture during the fourth Five-year Plan in terms of the target set for 1950. It is possible, however, to construct an estimate of total production, based on the data given for individual commodities and livestock numbers in Table 61 and on the relative value of each product (in terms of 1926/27 roubles) as given for 1937 and as a target for 1942 under the third Five-year Plan. These calculations, given in Table 62, indicate that the increase in the gross value of agricultural output from 1940 to 1950 was of the order of 7 per cent.

The need to increase substantially agricultural production as the necessary basis for a more balanced economic development, particularly in the consumption goods sector, is given recognition by the Soviet planning authorities in the programmes for expansion of the area under irrigation, the planting of extensive tree shelter belts, and other efforts for soil conservation and improvement. One of the most serious problems has been the shortage of draught power, growing out of the extremely heavy war-time losses of tractors and horses, which is partly responsible for heavy crop losses through delayed harvesting. Although tractor production has been at relatively high levels in recent years, by the end of 1950 there were still only about 0.4 tractors and 9.4 horses and mules for each 100

<sup>1</sup> An article in *Planovoe Khozyaystvo*, No. 2, 1947, by the Head of the Crop Estimating Inspectorate, B. Savelev, "Current Problems of the State Crop Estimating Inspectorate" seems to imply some change in estimating methods for textile fibres, industrial crops and vegetables which may invalidate comparison of the 1950 stated harvest estimate with the 1950 planned crop or with pre-war data. The crop estimating methods applied to grain since 1933 were extended to other crops in 1939.

<sup>2</sup> Increases reported for 1951 in livestock numbers on State farms and under collective ownership have no identifiable relationship to the total number of livestock in the country as a whole, since there has been during the post-war period a progressive shift from livestock held privately by peasants on the collective farms at the end of the war into collective ownership; and, in the territory acquired by the U.S.S.R. since 1940, there has been an almost complete collectivization by 1951, which has resulted in the reclassification of privately owned livestock as collective property.

hectares of sown area.<sup>1</sup> Nevertheless, the number of tractors supplied to agriculture during 1951 was reduced to 137,000 (in terms of 15 h.p. units) from 180,000 in 1950 and 150,000 in 1949.<sup>2</sup> At the same time, however, deliveries of combine harvesters continued to rise: the number supplied in 1951 amounted to 54,000 compared with 46,000 in 1950 and 29,000 in 1949. Intensive use of the equipment available has, moreover, permitted the attainment of a high level of mechanization on the farms. Mr. Beria's report for 1951 stated that nearly all the ploughing on the collective farms was mechanized, that three-fourths of the sowing was done with tractor-drawn seeders, and that over 60 per cent of the total grain crop was harvested with combines.

The failure to attain in 1950 the agricultural targets set under the Five-year Plan appears to have led to certain immediate changes in agricultural policy during 1951. One of the most important of these changes was in the collective farm amalgamation programme. During 1950 the merging of neighbouring farms into larger units had been actively encouraged<sup>3</sup>; by the end of the year considerable progress had been made in a number of regions, 252,000 collective farms having been amalgamated to form 123,000.

<sup>1</sup> Results of the 1950 Plan; Results of the fourth Five-year Plan; and estimate of tractor park from annual supply data and Voznesensky, *Voennaya ekonomika*, S.S.S.R., Moscow, 1947, page 160. Oxen are of course also used in the U.S.S.R. for draught power but their number is uncertain. For comparison, in the United States there were 2.3 tractors and 5.5 horses and mules per 100 hectares of sown area in 1949 (*Statistical Abstract of the United States*, 1950, pages 918-920.)

<sup>2</sup> The data announced regarding the supply of agricultural tractors and machinery again illustrate the difficulties of interpretation of single figures as compared with regular and clearly defined statistical series: before the war, figures were given on total tractor production (agricultural tractors not being separately distinguished), whereas since the war the only statements made in this connection refer to the number of tractors delivered to agriculture. It is not clear from the data whether the post-war figures are tantamount to production, or whether they also include the net amount of tractors obtained through trade, or whether in addition to new tractors, the numbers may also include reconditioned tractors.

<sup>3</sup> Cf. Report of the Central Statistical Administration for the Second Quarter, 1950, *Izvestia*, 28 July 1950.

The next stage of the programme was to have been the foundation of "agro-towns" to replace the dispersed homesteads of the existing farms. The construction of these townships would ensure urban amenities for the rural population but would involve the building of the new houses at the farmers' own expense and a reduction of the personal plots of land around each house to about one-seventh or one-tenth of a hectare.<sup>3</sup> In the early part of 1951, sharp criticism was advanced against the policy on the ground that it would impede the development of agricultural production,<sup>4</sup> and the programme seems to have been held in abeyance, since no further reference was made to it in official statements during the remainder of the year.

Another change was the thoroughgoing revision of the agricultural tax levied on the incomes of rural households. A decree of the Supreme Soviet, dated 30 August 1951, but retroactive to 1 July, revised the basis of calculating the tax in order to encourage the culture, on the small private plots on the collective farms, of certain crops best suited to the particular locality. The decree also increased substantially the tax-rate on those farm households which included able-bodied persons not working for the collective farm or for the State. Although the agricultural population of the Soviet Union is still relatively large, there are indications that, among the difficulties facing Soviet agriculture, there is a shortage of workers. The tax revision would appear to be aimed at ensuring that all available rural manpower is adequately employed in collective agriculture and is not drained away by other pursuits. The objective of concentrating manpower, as well as material resources, on collective rather than private ends also appears to have been the point of the numerous criticisms of violations of the Farm Bye-laws which appeared in the Soviet Press during the summer of 1951.

<sup>4</sup> Speech by N. S. Khrushchëv to a conference in Moscow on the Collective Farm Programme on 18 January, published in *Pravda*, 4 March 1951.

<sup>5</sup> E.g., speech by G. A. Arutyunov, Party First Secretary of the Armenian S.S.R., on 21 March 1951 at the 15th Congress of the Armenian Communist Party.



## 5. NATIONAL INCOME

The principal information available from Soviet sources on national income in recent years may be summarized as follows:<sup>1</sup>

(1) The movement from year to year in the total national income is given either in roubles at "1926/27 prices" or as index numbers, from which the following series may be constructed:

Year	Value at "1926/27 prices" <sup>a</sup> (billion roubles)	Index numbers (1940=100)
1937	96.3	75
1940	128.3	100
1946	..	..
1947	..	..
1948	149.1	116
1949	174.5	136
1950	209.9	164
1951	a	184 <sup>a</sup>

<sup>a</sup> Although the goal for 1950 set in the text of the fourth Five-year Plan was expressed in "1926/27 prices" (177 billion roubles), post-war data first published in January 1949, have been given only in terms of percentage increases, "in comparable prices", over the preceding year and over pre-war. For reasons discussed above in connection with the computation of the gross value of industrial production, it is nevertheless clear that the announced year-to-year increases in the national income have been computed on the basis of "1926/27 prices" throughout the Plan period ending in 1950.

(2) On the allocation of the national income, only two percentage figures are given, and these are computed on the basis of national income at current prices (the absolute amount in roubles not being published): the report on the execution of the Five-year Plan states that "the working people of the U.S.S.R. received in 1950 74 per cent of the national income to meet their personal, material and cultural requirements, while the remaining 26 per cent remained at the disposal of the State, of the collective farms and of the co-operative organizations for expanding Socialist production and for other needs of the State and society". The distribution as between these two broad categories was the same in 1950 as that reported for 1940. No information is given as to how the second category was divided as between capital investment, armaments, and other expenditure.

(3) Finally, the report on fulfilment of the fourth Five-year Plan states that in 1950 the total incomes of workers and employees and incomes of peasants was 62 per cent above 1940 "in comparable prices", a

<sup>1</sup> The Soviet definition of national income is considerably more restrictive than that employed in western European countries, being limited in the main to the production of material goods and to services closely related to such production, including freight transport and commerce. The concept excludes services performed by doctors, teachers, and domestic servants, the transport of passengers, and Government services (such as administration and troop pay and subsistence).

figure closely corresponding to the total increase indicated in national income over the period. This figure would presumably have been calculated from the sum of the total earnings of labour and the receipts in cash and kind of collective farmers, adjusted for changes in retail prices.

Analysis of the few figures given, as well as of the functioning of the Soviet economy in general, is limited by the absence of information on the national income and its origin and allocation in terms of current prices,<sup>2</sup> except as given above, and by the almost complete absence of any other official information on the structure and movement of prices and wages. This limitation is of crucial importance, since, as will be further discussed below, the estimate of the increase in total income, as well as of the share and movement of consumption versus other expenditures within the total, is heavily dependent on the prices employed in making the calculations.

### *Increase and Origin of the National Income*

The great increase in industrial production over the past decade has clearly been the most dynamic factor in the growth of the national income in the Soviet Union, and the official estimates indicate that, from 1940 to 1950, the rise in income was almost as great as that in the gross value of industrial production; that is, 64 per cent compared with 73 per cent.<sup>3</sup>

Since agricultural production was only about 7 per cent higher in 1950 than in 1940, according to the estimates given in Table 62, the relative prices of agricultural compared with industrial goods employed in making the income calculations evidently must be such as to assign a relatively low weight to agriculture.

<sup>2</sup> The only comprehensive figures for the Soviet Union in current prices available for recent years are those for the State budget, summarized in Table 63, which itself accounts for a very large but unknown part of the total income. In pre-war years, occasional statistics were also given on total wages and salaries paid out in the "national economy" and on the total value of retail sales by State and co-operative enterprises, but these data have not been regularly published for post-war years.

<sup>3</sup> A similar close relationship between the two series is also observable in the figures for pre-war years (grouped below in periods of four years each for comparison with the 1948 to 1951 period for which post-war data are available):

Period	Percentage increase during the period	
	National income	Industrial production
1929 to 1932 . . . . .	57	68
1933 to 1936 . . . . .	77	88
1937 to 1940 . . . . .	33	45
1948 to 1951 . . . . .	58	69

The gross value of agricultural production, here estimated at about 25 billion roubles in 1950 (Table 61), cannot be directly compared with the total national income of 210 billion roubles (both in "1926/27 prices") since the national income is, of course, computed on the basis of net value added by the different sectors of the economy. If, however, allowance is made for consumption by agriculture itself of agricultural products (mainly livestock feed and seed) and for commercial fertilizer, fuel and oil for tractors, depreciation of buildings and equipment, and other non-labour input items, the net contribution of agriculture to the national income could scarcely be placed at more than 60 per cent of the gross value<sup>1</sup>—that is, about 15 billion roubles in 1950 at "1926/27 prices". It thus appears that, in the computation of the value of the national income for the measurement of year-to-year changes, the weight assigned to agriculture was, in 1950, about 7 per cent. This percentage is only moderately higher than in the United Kingdom,<sup>2</sup> although more than half the population in the Soviet Union<sup>3</sup> still derives its livelihood from the soil as contrasted with about one-twentieth of the British population. Such a low ratio refers, it should be understood, only to the statistics as computed at the conventional "1926/27 prices" for measuring the value of the national income and cannot bear any close relationship to the real share of Soviet farmers in the national income.

The low current weight of agriculture in the national income estimate contrasts with a figure of 36 per cent for 1927/28 (computed at "1926/27 prices") the last

<sup>1</sup> This can only be a rough estimate, since current details of prices or quantities are not available, and figures on both gross and net agricultural production are not given in official sources for any year later than 1928. The ratio at that time was, in fact, about 60 per cent; while the structure of Soviet agriculture has changed considerably since then, both through greater emphasis on industrial crops and through greatly increased mechanization, the net effect is unlikely to have changed the ratio very markedly. It may be noted that, although the above analysis is necessarily based on rough approximations, the margin of error in either the estimated gross value of agricultural production in 1950 or in the ratio of net to gross value could scarcely affect the conclusion by more than a few percentage points in either direction.

<sup>2</sup> According to British official estimates, agriculture accounted for about 5 per cent of the United Kingdom total national income in 1950.

<sup>3</sup> At the end of 1950 there were 39,200,000 workers in the national economy, of which all but some 2½ million State farm workers were non-agricultural. Soviet census data showed 1.41 dependants per worker in 1939 (cf. Lorimer, *The Population of the Soviet Union*, League of Nations, 1946, page 225) which, assuming no major change in average dependants since, gives 90 millions dependent on non-agricultural occupations in 1950, or 44 per cent of the total population.

year for which this information is available from official sources.<sup>4</sup> Some diminution over the past quarter-century of the contribution of agriculture to total national income would necessarily result from the rapid industrialization of the country, but the greatly reduced weight attributed to agriculture seems to result rather more from the difficulties which have already been noted in the measurement of industrial production according to the methods employed until the past year. These problems, already serious in the computation of the gross value of industrial production, tended to influence still more strongly the computation of the net value, as required for purposes of the national income calculation. This is because the assimilation of new finished products at "conventional" prices into the accounts, while the raw materials were still largely valued at the prices ruling in 1926/27, would necessarily result in a progressive overstatement of the net value added in manufacturing.<sup>5</sup> The conclusion may thus be drawn that net industrial production, although never officially announced, must have shown an even greater increase in the national income accounts than that given in the published figures for gross industrial production and that, in consequence, the relative share of agriculture has fallen far out of proportion to its real importance in the national economy.

To what extent appropriate adjustments in the calculation of the national income at constant prices may have been made in connection with the introduction of a new pricing system for industrial production, as discussed above, cannot be known until further details are announced.

<sup>4</sup> Computed at current prices, however, a break-down, in percentage terms only, is available for 1937 as follows: industry, 53.1 per cent; agriculture, 25.7 per cent; building and construction, 5.8 per cent; transportation, 3.0 per cent; trade, 9.5 per cent; other, 2.9 per cent (*Tretii pyatiletnii plan razvitiya narodnogo khozyaistva Soyuz S.S.R.*, Moscow, 1939, page 197). In these figures, however, the relative contribution of industry and trade is greatly increased, compared with a valuation at factor cost, by the inclusion of turnover taxes levied on goods passing through these branches, and the share of agriculture is correspondingly diminished.

<sup>5</sup> This appears to be the principal explanation for the extraordinary increase from 39.9 per cent in 1928 to 53.4 per cent in 1937 in the proportion of "value added" to the total receipts of manufacturing establishments, as reported by Krasnolobov in *Problemy Ekonomiki*, September 1940, page 62. It should be noted, however, that (apart from the imperfections in the calculation of the gross value of industrial production) some increase in the ratio of net to gross value would result from the expansion and refinement of manufacturing, as industrialization developed, although scarcely on anything like the scale suggested by the difference between the figures cited for 1928 and 1937.

Table 63

RECEIPTS AND EXPENDITURE UNDER THE STATE BUDGET OF THE SOVIET UNION

Billions of roubles at current prices

	1937	1938	1939	1940	1946	1947	1948	1949	1950	1951 (Budget)
<b>REVENUE</b>										
Turnover tax . . . . .	75.9	80.4	96.9	105.9	190.9	239.7	247.3	245.5	236.1	244.7
Withdrawals from profits of enterprises . . . . .	9.3	10.5	15.8	21.7	16.6	22.6	27.2	42.2	40.4	47.2
Personal taxes . . . . .	4.0	5.1	7.0	9.4	22.7	28.0	33.2	33.7	35.8	43.4
State Loan . . . . .	5.9	7.6	8.4	11.5	24.7	25.7	23.9	27.6	31.0	33.4
Other revenue . . . . .	14.2	23.9	27.9	31.7	70.5	70.2	78.9	88.0	78.9	90.0
<b>Total . . . . .</b>	<b>109.3</b>	<b>127.5</b>	<b>156.0</b>	<b>180.2</b>	<b>325.4</b>	<b>386.2</b>	<b>410.5</b>	<b>437.0</b>	<b>422.1</b>	<b>458.7</b>
<b>EXPENDITURE</b>										
National economy . . . . .	43.4	51.7	60.4	58.3	106.2	133.1	149.6	161.9	157.3	178.5
Social and cultural measures . . . . .	25.7	35.3	37.4	40.9	80.0	105.9	105.6	116.0	116.8	120.8
Defence . . . . .	17.5	23.2	39.2	56.8	73.6	66.3	66.3	79.2	82.9	96.4
Administration . . . . .	4.4	5.4	16.3	6.8	11.8	13.0	13.1	13.5	13.8	14.3
Other expenditure . . . . .	15.2	8.4	11.6	11.6	35.9	43.2	36.3	41.7	41.9	41.6
<b>Total . . . . .</b>	<b>106.2</b>	<b>124.0</b>	<b>153.3</b>	<b>174.4</b>	<b>307.5</b>	<b>361.5</b>	<b>370.9</b>	<b>412.3</b>	<b>412.7</b>	<b>451.5</b>
<b>SURPLUS . . . . .</b>	<b>3.1</b>	<b>3.4</b>	<b>2.7</b>	<b>5.9</b>	<b>17.9</b>	<b>24.7</b>	<b>39.6</b>	<b>24.7</b>	<b>9.4</b>	<b>7.2</b>

Sources: K. Plotnikov, *Byudzhel sotsialisticheskogo gosudarstva*, Moscow, 1948; *Finansy S.S.S.R. za XXX let*, Moscow, 1947; A. Zverev, *Gosudarstvennye byudzhety Soyuza S.S.R. 1938-1945*, Moscow, 1946; *Bolshevik*,

No. 12, 1950, and annual budget debates (in *Zasedaniya Verkhovnogo Soveta S.S.S.R.*).

Consumption Expenditures

The relative amount of the national income which is spent on consumption is a function not only of the quantities of consumer goods produced as compared with other types of goods, but also of their relative prices. Without information on the structure and comparative movement of prices, the figure of 74 per cent as the share of consumption in the national product loses significance for purposes of international comparison (in addition to those difficulties which arise out of differences in national income concepts) and, indeed, has no clear independent meaning of its own.

There is one very important feature of the Soviet price system which serves to illustrate the importance of the foregoing limitations; that is, the incidence of the turnover tax on the prices of consumption goods. This tax, which has been the most significant characteristic of the Soviet fiscal system since 1930 and has been extended throughout all of eastern Europe since the war, accounts for more than half of total budget receipts in the Soviet Union (Table 63). Details of the tax according to the individual products mainly affected are not available, but it is clear from

the data for 1939 presented in Table 64 that investment goods are taxed very lightly, while consumer goods account for some 85 to 90 per cent of total collections under this heading.

Table 64

DISTRIBUTION  
OF TURNOVER TAX COLLECTIONS IN 1939  
BY PRINCIPAL COMMISSARIATS

Percentage distribution

People's Commissariat for	Share in turnover tax payments	Share in gross value of industrial production at "1926/27 prices" <sup>a</sup>
Textile industry . . . . .	13.0	10.2
Light industry . . . . .	2.6	7.9
Food industry . . . . .	29.7	11.7
Meat and dairy industry . . . . .	7.3	4.5
Procurement <sup>b</sup> . . . . .	34.4	2.5
Oil industry . . . . .	8.0	3.1
Other Commissariats (chiefly for heavy industry) . . . . .	5.0	60.1

Sources: A. K. Suchkov, *Dokhody gosudarstvennogo byudzheta S.S.S.R.*, Moscow, 1945, page 16.

<sup>a</sup> Excluding output of producers' co-operatives.

<sup>b</sup> Including mainly milling industries.

No more recent figures have been published on the sources and rates of the turnover tax, but such information as there is gives no reason to suppose that the share of the different branches of industry in tax payments has changed much since 1939.<sup>1</sup> A few average rates are available for 1949 for textiles,<sup>2</sup> amounting to 77 per cent of the retail price for cotton goods, 66 per cent for wool cloth, 59 per cent for knitted goods, 52 per cent for linen, and between 53 and 70 per cent for silks. If expressed as a percentage of the price before tax, the rate of tax on cotton goods in 1949, for example, was thus about 335 per cent. The incidence of turnover tax appears to be highest on those goods whose weight in consumption is greatest, such as cotton, and least on the less consumed items, such as silk and linen. The tax is especially great on salt, an article of general consumption the expenditure on which is small in relation to total consumer outlay.<sup>3</sup>

The turnover tax is the principal instrument for equilibrating consumer purchasing power with available retail supplies, and as the flow of goods into the shops has risen from the extreme dearth during and after the war, there has been a selective reduction in turnover tax rates since 1949 expressed in the price reductions announced in March of each year.

Table 65

TURNOVER TAX ON WOOL CLOTH IN 1949 AND ESTIMATED CHANGES IN 1950 AND 1951

	1949	1950	1951
Production increase during preceding year (per cent) <sup>a</sup>	28	19	3
Price reduction announced in March (per cent) <sup>b</sup>	10	12	0
Retail price (roubles per metre) <sup>c</sup>	97.20	85.55	85.55
Turnover tax (roubles per metre) <sup>d</sup>	64.15	52.50	52.50
Turnover tax as percentage of price <sup>d</sup>	66	61	61

<sup>a</sup> From reports on plan fulfilment for 1948, 1949 and 1950.

<sup>b</sup> *Izvestia*, 1 March 1949, 1950 and 1951.

<sup>c</sup> From Table XXXV in Appendix A.

<sup>d</sup> Data for 1949 from A. K. Suchkov, *Gosudarstvennye dokhody S.S.S.R.*, page 97, giving turnover tax as equal to 66 per cent of retail price. Data for 1950 and 1951 are estimated on the assumption that the absolute decline in the retail price is accounted for by an equivalent reduction in the turnover tax.

<sup>1</sup> In 1939 turnover tax receipts accounted for 62 per cent of total Government receipts; in the 1951 Budget they represented 53 per cent.

<sup>2</sup> A. K. Suchkov, *Gosudarstvennye dokhody S.S.S.R.*, Moscow, 1949, pages 96-97.

<sup>3</sup> Suchkov, *op. cit.*, page 85, cites a wholesale price of salt before tax of 95 roubles per ton. At that time, 1949, the retail price of cheaper grade salt after tax was 980 roubles (cf. Table XXXV), the tax thus being equivalent to 90 per cent of the retail price, or some ten times the wholesale price.

Table 65 shows how, with wool as an example, the incidence of the turnover tax would appear to vary with supplies.

It is not possible, in the absence of information on the total value of consumption expenditures, to estimate very accurately the general impact of the tax on consumption as a whole. Some comparisons can be made for earlier years, however, with less comprehensive data on wages and salaries and on the value of retail sales, if it is assumed that the share of total tax collections falling on consumer goods in 1939 is typical for other years as well.

	1940	1948
Collections from turnover tax on consumer goods <sup>a</sup>	90	210
Wages and salaries paid "in the national economy" <sup>b</sup>	162	320
Value of retail sales through State and co-operative shops <sup>c</sup>	174.5	..

<sup>a</sup> Estimated at a minimum of 85 per cent of total collections under the turnover tax on basis of data for 1939. See Table 64.

<sup>b</sup> Figure for 1940 from *Kalendar Spravochnik*, Moscow, 1948, page 138; figure for 1948 deduced from *Voprosy Ekonomiki*, No. 8, 1948, page 23, stating that the total for the year was nearly twice as high as in 1940. Data do not include incomes of collective farmers and artisans.

<sup>c</sup> Figure for 1940 from Voznesensky, *Economic Results of 1940*, Moscow 1941, page 10. Data do not include sales on collective farm markets.

These comparisons tend to overstate the incidence of the tax on consumption, since, as mentioned in the notes to the figures, neither the wage bill nor retail sales include all money transactions, and both exclude, of course, food and other consumption in kind on the farms. It can nevertheless be very roughly estimated that collections by the State under the turnover tax represent at least one-third and possibly as much as one-half of total expenditures on consumption in the country as a whole.<sup>4</sup> In other words, if the relative share of consumption in national income is computed exclusive of the

<sup>4</sup> Since a number of services (personal, administrative, judicial and military) are excluded from the Soviet definition of national income, neither the original estimates nor the illustrative figures given above can be directly compared with the national income estimates of western European countries. Some of these services contribute to personal consumption but others fall into the non-consumption category; in consequence, the share of consumption in the wider concept of national income may not be very different from that in the Soviet concept.



turnover tax, it would amount to some 60 to 65 per cent of the total. This is purely an illustrative calculation, since, even apart from the turnover tax, so little is known about the relationship between the prices of consumption goods and other goods, but it shows some of the problems arising in making estimates of the allocation of the national income: the inclusion of such a heavy element as the turnover tax in consumer outlays has the effect that, the greater the tax paid by consumers, the higher is the computed share of consumption in the national income.

The evolution of consumption as part of national income from the pre-war to the post-war period also gives rise to difficult analytical problems which could be resolved only in the light of more information than is now available. The identity of the percentage share in 1940 and in 1950—74 per cent in both years—means one or more of the following:

- (a) that the output of consumer goods has kept pace with the rise in production of other goods; or
- (b) that in 1950 compared with 1940 a very substantially increased volume of consumer goods has been obtained in exchange for other types of goods through foreign trade; or
- (c) that consumer goods prices have increased substantially between 1940 and 1950 in relation to the prices of other goods.

The first hypothesis must be rejected, since the data available on industrial and agricultural production (Tables 58 and 61) show that none of the big staple items of consumption had increased more than moderately in 1950 compared with 1940. The output of consumer goods has, of course, risen rapidly from the extremely low levels prevailing at the end of the war, and the purchasing power of the population over these goods has steadily increased through the progressive price reductions beginning in 1949. The lack of information on changes in wage rates and the cost of living makes it difficult to say how real wages at present compare with pre-war levels, but the data available on the production of consumer goods indicate that the present level could not be very much higher in real terms than before the war.<sup>1</sup>

<sup>1</sup> Real wages per hour worked in industry would show a less favourable evolution since a longer working week was introduced by a Decree of 26 June 1940. An eight-hour day replaced the standard seven-hour day (a seven-hour day replacing the six-hour day applicable to miners and heavy industrial workers) and the six-day week was changed to a

The second hypothesis cannot be examined in any detail in the absence of information on Soviet foreign trade. From the trade statistics of the leading industrial countries in western Europe and overseas, it is known that virtually no consumer goods are imported from them by the Soviet Union, although significant amounts appear to have been imported from eastern European countries,<sup>2</sup> especially Czechoslovakia and eastern Germany. For the available amount of consumer manufactures to increase in proportion to the reported rise in national income from 1940 to 1950, however, the increase in the net amount obtained through trade would have had to equal roughly 50 per cent of the total output of consumer manufactures in the Soviet Union in 1940, after taking account of such increase as did occur in the manufacture of consumer goods in the Soviet Union over the period.<sup>3</sup>

The third hypothesis appears to be the only one capable of explaining the constancy of the share of consumption in the total national income in 1940 and in 1950 and is supported by the estimates, necessarily approximate, given in Table 66. These estimates indicate that consumption goods increased very much less in quantity but considerably more in price than other goods, with the result that the share of consumption in total money income, although not in real income, was about the same in 1950 as in 1940.<sup>4</sup>

seven-day week with Sunday as the general rest day. This was equivalent to raising the work week from 41 to 48 hours (standard) and from 35 to 42 hours (miners and heavy industrial workers). These hours have remained in effect since the war.

<sup>2</sup> On the other hand, the Soviet Union has itself supplied consumer goods, notably grain, to some of these countries as well as to others.

<sup>3</sup> This leaves out of account foodstuffs, which alone account for about one-half of total consumption.

<sup>4</sup> The data in column 3 of Table 66 would, if not further qualified, imply an increase in real national income of only about 23 per cent from 1940 to 1950. This figure, however, would probably be somewhat too low, since it reflects the heavy share assigned to consumption in official estimates of the allocation of the national income, and this share, in turn, is heavily influenced by the incidence of the turnover tax on consumption expenditures, as explained above.

The whole of the present analysis, in so far as it bears on national income estimates, may be summed up in the conclusion that (1) in the estimates of the past increases in national income (at "1926/27 prices") a relatively heavy weight has been given to rapidly expanding sectors of production, such as engineering goods, and a relatively light weight to other more slowly rising sectors, such as agriculture and consumer manufactures, whereas (2) in the estimates for any one year of the allocation of the national income (computed at current prices) the share assigned to consumption goods tends to be increased, in relation to that given to investment and defence goods, by the incidence of turnover taxes and, in comparison with pre-war years, by the relative increase in consumer prices.

Table 66

ESTIMATES OF CHANGES FROM 1940 TO 1950 IN OUTPUT AND PRICES DETERMINING THE SHARE OF CONSUMPTION IN SOVIET NATIONAL INCOME AT CURRENT PRICES

Allocation of national income <sup>a</sup>	Share in national income in 1940 (per cent) <sup>b</sup>	Estimated index of output of goods and services in 1950 available for I and II (1940=100) <sup>c</sup>	Columns (1) × (2) / 100	Estimated index of prices in 1950 (1940=100) <sup>d</sup>	Columns (3) × (4) / 100	Share in national income in 1950 (per cent) <sup>e</sup>
	(1)	(2)	(3)	(4)	(5)	(6)
I. Consumption . . . . .	74	110	81.4	183	149.0	73.8
II. Investment and defence <sup>f</sup> . . . . .	26	160	41.6	127	52.8	26.2
	100	—	123.0	—	201.8	100

NOTE. — The index numbers in columns 2 and 4 are rough estimates by the Research and Planning Division, Economic Commission for Europe, based on separate data available or derivable from official sources regarding changes in production and prices.

<sup>a</sup> Limited to production of material goods and to closely ancillary services.

<sup>b</sup> N. Vosnesensky, *Voennaya ekonomika S.S.S.R.*, Moscow, 1947, page 67.

<sup>c</sup> Increase in production of consumption goods is roughly estimated on the basis of data for major food crops (discussed in section 4 of this chapter) and for manufacturing industries producing primarily consumption goods (discussed in section 2); these two sources accounting for the bulk of personal consumption. Increase in output of other goods is estimated on the basis of official figures on the volume of investment (Table 68) and the estimated

increase in the "volume" of defence outlays expressed in investment goods equivalent (see text, page 144).

<sup>d</sup> The derivation of the consumption price index is explained in "Notes to the Statistics". The price index for investment goods (used also with respect to defence goods) is from Table 68.

<sup>e</sup> Calculated from data in preceding columns. Report on Fulfilment of Fourth Five-year Plan gives: consumption, 74 per cent, and other, 26 per cent.

<sup>f</sup> Share "remaining at the disposal of the State . . . for expanding Socialist production and for other needs of the State and society (material expenditures for the maintenance of administrative, defence and scientific organs)".

This explanation, however, would seem to be in conflict with the statement that from 1940 to 1950 the total incomes of the working population increased by 62 per cent "in comparable prices" and cannot be further tested in the absence of official data on personal incomes and consumer prices.

#### Investment and Defence Expenditures

As in most other countries, capital investment and military expenditures are the two other main factors which compete between themselves and with consumption for the resources of the Soviet Union. These two claims on the national resources are not only of roughly similar orders of magnitude but are also closely interrelated <sup>1</sup> and, as in most other countries, are not clearly distinguishable from each other. The expenditures included under the heading of defence

cover only what is referred to, in official terminology, as "direct" defence outlays: <sup>2</sup> expenditures of a capital nature for the construction of defence installations and for the development of plant capacity in the defence industries are paid out of the budgets of the various ministries concerned, and the defence item proper appears to be limited to payments for the procurement of armaments and munitions and troop pay and subsistence.

Chiefly because of the lack of adequate information on the structure of prices and the resulting uncertainty regarding the computed share of consumption in the

<sup>1</sup> The two objectives were linked by the Chairman of the State Planning Commission when, in presenting the report on the Five-year Plan to the Supreme Soviet on 15 March 1946, he stressed the necessity "to strengthen further the military-economic might of the Soviet State". The Law on the Plan, as passed by the Supreme Soviet, gave as one of its principal aims "to further enhance the defensive power of the U.S.S.R. and to equip its armed forces with up-to-date weapons".

<sup>2</sup> *Finansy S.S.S.R. za XXX let*, Moscow 1947, page 185, defines, for example, "Direct defence expenditures, i.e. expenditures for the finance of the Commissariats for Defence and for the Navy". Construction of military installations as well as armaments factories are excluded from this budget item and entered to the account of other ministries, mainly the former Ministry for the Construction of Army and Navy Enterprises (now the Chief Directorate), the Ministry of Armaments, the Ministry of the Aviation Industry and the various construction ministries, budget expenditures for which are included under the classification "National Economy". The investment statistics quoted include investments of all the above ministries (cf. Chapter II, paragraph 20, of the Law on the Five-year Plan). The inclusion of certain capital investment work primarily for military purposes under other budget headings is, in varying degrees, a feature of the public accounts of other countries.

**Table 67**  
**DEFENCE EXPENDITURE AND GROSS INVESTMENT IN THE SOVIET UNION**  
**FOR SELECTED YEARS, 1937 TO 1951**

*Billions of roubles at current prices*

Year	DIRECT DEFENCE EXPENDITURE	GROSS INVESTMENTS			Ratio of defence expenditure to gross investments
		Through State budget	By enterprises	Total	
1937 . . . .	17.5	27.8		30.0 <sup>a</sup>	58.3
1938 . . . .	23.2	24.9	10.9	39.1 <sup>a</sup>	59.3
1939 . . . .	39.2	25.1	9.6	37.9 <sup>a</sup>	103.4
1940 . . . .	56.8	24.4	11.7	43.0 <sup>a</sup>	132.1
1946 . . . .	73.6	37.4	6.8	44.2 <sup>b</sup>	<sup>b</sup>
1947 . . . .	66.3	49.2	9.6	58.8 <sup>b</sup>	<sup>b</sup>
1948 . . . .	66.3	57.2	9.0	66.2 <sup>b</sup>	<sup>b</sup>
1949 . . . .	79.2	79.8	25.7	105.5 <sup>b</sup>	<sup>b</sup>
1950 . . . .	82.9	99.8	19.5	119.3	69.5
1951 . . . .	96.4	92.6	28.1	124.4 <sup>c</sup>	77.5

Sources: The figures have been derived from the same sources as those in Table 63 and from Voznesensky, *Voennaya ekonomika S.S.S.R.*, Moscow, 1947, page 12.

NOTE. — The figures in italics relate to planned figures in the annual budget.

<sup>a</sup> "Decentralized investments", a classification which has not been published since the war, is included in pre-war totals: appropriations were—1939, 3.2 billions of roubles and 1940, 4.8 billions of roubles. The total for 1938 has been obtained by applying the ratio of decentralized investments

in 1939 to the sum appropriated for centralized investments (viz., 35.8 billions of roubles).

<sup>b</sup> Investment figures for 1946–1949 are not directly comparable with those for other years because of the subsidization of the industries producing investment goods in that period and, for the same reason, the ratio of defence expenditure to gross investment is not computed.

<sup>c</sup> Including 3.7 billions of roubles "additional expenditure in planning work", source of finance not being specified.

total, it is not possible to relate either investment or defence expenditures to the total national income, nor even to compare the outlays under these two headings with other items of the budget. The patterns of costs within the two groups of expenditure, investment and defence, are not so dissimilar, however, that an approximate comparison may not be made between them. Such a comparison is made in Table 67, the data on investment including amortization as well as new investment and covering, as will be observed, not only investments made through the State budget but also those amounts financed directly by industry.<sup>1</sup>

These figures show that direct defence outlays during the past two years have averaged close to three-fourths as much as total gross investment, a higher ratio than in the pre-war years 1937 and 1938 but a substantially smaller ratio than during the period of greatly inten-

sified military preparation between the time of Munich and the German attack on the Soviet Union.

In addition to the figures on the value of gross investment in current prices (as in Table 67) official estimates are also available on the growth in the volume of investment expressed in constant prices or as index numbers, from which the series shown in Table 68 can be derived. According to these estimates, the volume of investment has grown rapidly over the period, being about 2½ times the 1940 level in 1951, according to Mr. Beria's speech of 6 November 1951, and 3½ times the 1937 level. It will be noted that the prices of investment goods and services were slightly below the 1940 level in the immediate post-war period; wholesale prices were kept from rising during the war<sup>2</sup> and even declined moderately, and it was not until January 1949 that any other than minor upward adjustments were made. Costs of the industries producing investment goods, on the

<sup>1</sup> The figures may thus be taken as virtually equal to gross fixed investment in the country as a whole, the only significant item omitted being investment on the collective farms (investment on State farms, however, being included). These collective farm investments accounted for only 1.3 per cent of all planned investment during 1946–1950.

<sup>2</sup> N. Voznesensky, *Voennaya ekonomika S.S.S.R.*, Moscow, 1947, page 127. The index of State wholesale prices in 1942 was 98 (1940=100).

other hand, were substantially above those prevailing before the war, the difference between their costs and selling prices being borne by subsidies out of the State budget. In January 1949 increased wholesale prices were introduced<sup>1</sup> and this change, together with the drive to reduce costs, was expected to make possible the elimination of subsidies. During 1949, costs were in fact reduced and as a result wholesale

Table 68

GROSS INVESTMENT EXPENDITURE :  
ESTIMATED VOLUME AND PRICE MOVEMENTS

Year	Volume (Billions of roubles at 1940 prices)	Investment goods prices (Index numbers) 1940 = 100)
1937 . . . .	30.9	97
1940 . . . .	43.0	100
1946 . . . .	47.0	94
1947 . . . .	..	..
1948 . . . .	63.7	104
1949 . . . .	75.7	135
1950 . . . .	94.6	127
1951 . . . .	107.2	116

Sources : See " Notes to the Statistics ".

prices were brought down in January 1950.<sup>2</sup> In presenting the 1950 Budget,<sup>3</sup> the Minister of Finance announced additional measures, including a supplementary reduction of prices and transport tariffs for building materials aimed at a decrease of 25 per cent in construction costs.

<sup>1</sup> According to P. Vladimirov, *Voprosy Ekonomiki*, No. 8, 1948, the increases affected metals, fuel, electricity, thermal power, timber, cement, bricks, and rail freights.

<sup>2</sup> The plan report for the first quarter of 1950 stated that " big achievements in the development of industry and transport, the rise in labour productivity and the reduction of production costs attained in 1949, as well as the considerable reserves for a further noteworthy reduction of production costs which were brought to light, enabled the Government to carry out from 1 January 1950, a cut in the wholesale prices for metal, machines and equipment, chemicals, building materials, timber and paper as well as to cut down tariffs of electric power and goods transport by rail " (*Izvestia*, 27 April 1950).

<sup>3</sup> *Izvestia*, 14 June 1950.

No volume or price data comparable to those given in Table 68 for investment are available with respect to defence outlays. As far as munitions and military installations are concerned (which would form a substantial part of the total under peace-time conditions) the volume of production usually defies measurement in all countries because of the great technical changes embodied in military end-items, nor indeed would such a concept of " volume " be of much interest for economic analysis. It is rather, as in other countries, the demands made by defence outlays on the national resources which are of interest. For this purpose, a very rough approximation can, however, be obtained by deflating defence expenditures in current roubles by the price index for investment goods, the result being properly regarded not as a measurement of the volume of defence goods and services produced, but rather as an indication of the volume of investment goods and services forgone because of the demands levied by defence on available resources. Estimated in this way, the volume of resources devoted to defence purposes shows the following movement (in billions of roubles at 1940 prices) :

1937 . . . .	18	1948 . . . .	64
1940 . . . .	57	1949 . . . .	59
1946 . . . .	78	1950 . . . .	65
1947 . . . .	..	1951 . . . .	83

Thus, in terms of the alternative uses forgone, the claims of national defence have been extremely heavy, equalling or exceeding the 1940 level in each of the last several years and, in 1951, being roughly two-thirds greater than the total volume of resources devoted to investment and defence purposes combined in 1937.

While all of the foregoing analysis relating to the allocation of the national income is necessarily of a very approximate nature because of the paucity of information available, the general conclusion may be drawn that, out of its growing volume of resources available each year, the Soviet Union has devoted a substantial and, at present, increasing amount to defence and a somewhat larger and steadily rising amount to investment, while the amount assigned to consumption has so far increased only moderately above pre-war levels.



## 6. MONETARY STABILITY

Despite the heavy demands placed upon Soviet resources by the allocation of a large share of the national product to investment and defence,<sup>1</sup> continuation of monetary stability seems assured. Several factors combine to place the Government in a strong position for combating inflation.

In the first place, the long experience of the Soviet authorities in planning permits the establishment of reasonably close advance estimates of the goods to be available for consumption, while the control of wage payments<sup>2</sup> and consumer prices,<sup>3</sup> equilibrated through the effective instrument of the turnover tax, serves to prevent any significant divergence from developing between actual demand and consumer supplies. This position is strengthened by the development since the war of the State Loan as a pre-determinate means for the absorption of purchasing power, and by the policy in effect for the past few years of distributing the benefits of increased productivity by lower prices rather than by higher wages. There is thus little likelihood of a wage-price spiral developing, as in other countries where sectional re-alignments of

wage rates frequently give rise to more effective demand than can be satisfied out of current increases in production.

Another major factor facilitating maintenance of monetary stability lies in the relative ease with which resources can be shifted, in either direction, between investment and armaments. Given the nature of armaments production in general and the structure of the Soviet economy in particular—characterized by the strong development of the engineering and other equipment goods industries and the more modest development of the consumption goods industries, especially those producing consumer durables—the current increase in defence expenditures is necessarily, in the main, at the expense of potential investment and need not be very strongly felt in the consumption sector. It is relevant to note in this connection that, since so large a part of investment passes directly through the State budget and virtually all of the remainder is subject to the over-all Plan, the shift of resources from investment to defence purposes is far easier to effect, without risk of inflation, than in other less centrally controlled economies where private investment decisions must be influenced by other and more indirect methods, including general credit and fiscal policy and *ad hoc* licensing or allocation schemes.

Thus, during 1951, there seems to have been a substantial shift from investment to defence in the allocation of resources (expressed in real terms as in the preceding section): defence claimed about 60 per cent of the increase over the preceding year in the volume of resources devoted to defence and investment combined, whereas in 1950 more than 70 per cent of the increase in the combined total had been allotted to investment. At the same time, the increase in consumption in 1951 appears to have been much more moderate than in other recent years, as far as may be judged by the stated value of the annual reductions in consumer prices and in the absence of information on such other price movements as there may have been. The value of the reductions announced in March 1951 was 34.5 billion roubles, or about one-third as much as in 1950 and half as much as in each of the two preceding years, as shown by Table 69.

<sup>1</sup> During the Second World War the Soviet economy was, of course, subjected to far greater inflationary pressure than at present, because of the occupation of important producing areas by the Nazi forces and the direction into war production of the smaller resources which remained under Soviet control. As one illustration, 60 per cent of the iron and steel capacity was temporarily lost by enemy occupation, while 70 per cent of the rolled steel output in the unoccupied areas went directly into war production (Voznesensky, *Voennoye ekonomika S.S.S.R.*, pages 70-71). Under these strains, the note issue inevitably increased very greatly, some of it going into war savings but most of it into non-ration shops and into the hands of the peasants at enormously inflated prices, although the price of ration goods was kept firmly under control. Through its currency reform carried out in 1947, appropriately timed to coincide with the re-emergence of civilian goods production, nine-tenths of the surplus currency in private hands was wiped out, and the level of retail prices in 1948 was no higher in relation to pre-war than in the United Kingdom or the United States.

<sup>2</sup> Total wage income in the economy as a whole is effectively controlled by making the wage fund established for each enterprise conditional upon the acceptance, by management and by the workers, of the production target for the enterprise, and by relating, through the centralized financial control of the Gosbank, actual wage disbursement to the achievement of those targets. Payments in excess of the limit established may be made only *pari passu* with overfulfilment of production goals and, contrariwise, the wage fund for each enterprise may be reduced to the extent that production falls short of the objective.

<sup>3</sup> Prices on the collective farm markets, and consequently the money incomes of farmers, are not directly controlled, it should be noted, but are adequately influenced by the level and prices of State procurement and by State retail trade in agricultural commodities since the abolition of consumer rationing in 1947 (Cf. Sorokin, *Bolshevik*, No. 24, 1948, page 26).

**Table 69**  
**PURCHASING POWER EQUIVALENT**  
**OF ANNUALLY ANNOUNCED REDUCTIONS**  
**IN RETAIL PRICES <sup>a</sup>**

*Billions of roubles at current prices*

Year	State retail trade	Kolkhoz and co-operative trade	Total retail trade
1948 . . .	57	29	86
1949 . . .	48	23	71
1950 . . .	80	30	110
1951 . . .	27.5	7	34.5

*Sources: Izvestia, 1 March 1949, 1950 and 1951.*

<sup>a</sup> Computed on basis of trade turnover of the corresponding year.

The experience during 1951 is not necessarily, however, an indication of the prospects for raising consumption standards in the years immediately ahead. With large natural resources, a greatly expanded equipment goods industry, rapidly growing mechanization in industry and wide margins for further increases in labour productivity, the total national product may be expected to continue a fairly rapid expansion. The fact that, hitherto, the

output of consumer manufactures has not represented a very large share of total production means that substantial percentage increases in that sector remain practicable, even though the greater share of the absolute increase from year to year may be devoted to other types of production. The most serious limiting factor is, of course, the relatively low output of agriculture, which has shown only a moderate growth over the last forty years <sup>1</sup> and constitutes the necessary basis for at least two-thirds of personal consumption, including food, clothing and footwear. Here also, however, the programme mentioned above to expand productive resources through increases in the irrigated area and other means should begin to bear fruit increasingly during the next decade. It is therefore possible that the plan for 1951-1955, when published, will indicate that greater emphasis is to be given to the production of consumer goods than during the last Five-year Plan, and the recent report by Mr. Beria suggests that increasing attention is, in fact, being paid to the consumption sector.

<sup>1</sup> See the article "Long-term Trends in European Agriculture", *Economic Bulletin for Europe*, Vol. 3, No. 2, pages 19 to 39.

# Addendum to Chapter 5

## EXTRACTS FROM OFFICIAL JOURNALS REGARDING CHANGES MADE IN THE CALCULATION OF THE GROSS VALUE OF INDUSTRIAL PRODUCTION

I. Extract from "Planning Industrial Production" by B. Miroshnichenko, in *Planovoe Khozyaistvo* No. 3, 1951, pages 82-91 (Journal of the State Planning Commission of the U.S.S.R.)

"... Gross production is a basic factor determining a number of other important indices in respect of the national economic plan. National income, for example, is calculated on the basis of gross physical production in all branches of industry. . .

"Until 1949 gross output was planned in 1926/27 constant prices, and commodity production in actual wholesale prices. Since 1949, by Government decision, the planning of gross output no longer takes place in these constant prices, both gross output and commodity production now being planned in terms of the actual wholesale prices of the enterprise concerned. The reason why planning of gross output in 1926/27 constant prices was abandoned is that the pattern of industrial production has altered very considerably as compared with 1926. Many goods now being turned out were not in production either in 1926 or even under the pre-war Five-year Plans. Many types of industrial production have been developed during the period of the first post-war Five-year Plan, while radical changes have occurred in the production techniques in respect of goods which were already being manufactured in 1926.

"Thus 1926/27 prices have become obsolete as being divorced from modern conditions of production and incapable of providing a link between gross output and its cost.

"The transition to the system of planning gross output in terms of the actual wholesale prices of undertakings presupposes that, in determining the rate of increase of gross output, the figures in respect of the draft plan for the coming year and of actual output in that period will be calculated in comparable prices."

II. Extract from "On Calculating the Index of the Physical Volume of the National Product" by P. Moskvina, in *Vestnik Statistiki* No. 2, 1951, pages 10-19 (Organ of the Central Statistical Administration of the U.S.S.R.)

"... The trend in the physical volume of production for any two periods may differ according to the datum period selected for providing the constant prices for calculating the corresponding index.

"Thus the trend of production in 1950 as compared with 1949, calculated in terms of 1945 prices, may fail to correspond exactly with the trend of the physical volume

of production for the same years calculated in 1940 prices. . .

"Let us take the following examples :

Items	Quantity expressed in physical terms		Prices in roubles per unit	
	1949	1950	1940	1945
A	1,000	1,200	10	12
B	2,000	4,000	5	4

"Taking 1940 prices as constant, the index of the physical volume of production showing the rate of increase in 1950 as compared with 1949 is as follows :

$$\text{Index of the physical volume of production} = \frac{1200 \times 10 + 4000 \times 5}{1000 \times 10 + 2000 \times 5} = 1.60$$

"The same index calculated in 1945 prices would be as follows:

$$\frac{1200 \times 12 + 4000 \times 4}{1000 \times 12 + 2000 \times 4} = 1.52$$

"... Until 1949, gross industrial output was estimated in 1926/27 constant prices, in planning and calculating industrial production. Corresponding estimates of industrial production were made in each individual industrial enterprise.

"In 1949 a new procedure for planning and hence for calculating industrial production was laid down, whereby industrial production was planned in terms of the actual prices charged by the enterprise. . .

"In 1949 and 1950 industrial production was also planned in wholesale prices, including turnover tax. . .

"Nevertheless, the problem of calculating the indices showing the trend of the physical volume of production still remains, and for that it is essential, by some means or other, to express production in separate periods in comparable prices. With that end in view, industrial output was calculated, in 1949 and 1950, in actual wholesale prices, while at the same time the method of calculating in 1926/27 constant prices was temporarily retained.

"Such revaluation made it possible to compare the actual volume of production with the volume fixed by the Five-year Plan for the Restoration and Development of the National Economy. . .

"It must, of course, be borne in mind that, in revaluing production for each period of a given statistical series, in terms of the prices of one particular period, the employment of too remote a basis for calculation (as was the case with 1926/27 prices) must be rejected. For practical purposes, the period selected should not be more than five years removed. . ."

## Chapter 6

### THE EUROPEAN COAL PROBLEM

#### 1. INTRODUCTION

Among the many commodity shortages which have befallen Europe since the war, the shortage of coal stands out as both the most serious and the most unnecessary.

On the one hand, Europe is still an economy predominantly based on the use of coal. Whereas in the United States the consumption of oil and natural gas has in recent years increased so much that only one-quarter of the total heat and motive power used is now derived from coal, in Europe as a whole<sup>1</sup> the corresponding proportion, though somewhat lower than it was two decades ago, is still, as Table 70 demonstrates,<sup>2</sup> around three-quarters, and in the great industrial countries of western Europe as high as 90 per cent.<sup>3</sup>

On the other hand, Europe, which lacks many raw materials, has plentiful reserves of coal. Traditionally, Europe has been self-sufficient in coal, as Chart 7

illustrates, and until the Second World War usually exported a small quantity. Before 1951, substantial amounts of coal had been imported into Europe from overseas on only three occasions—in the years 1919 and 1920, in 1926 and in the years immediately following the Second World War. (Coal imports lasted for only two years after the First World War as compared with four after the second, mainly because there was a severe depression in 1921 which reduced industry's demands.) Each time the imports filled a relatively small emergency gap created in the one case by a strike in the United Kingdom and in the other two by the need to get industry going quickly at a time when conditions approaching chaos still existed in some war-devastated coal-fields.

It was at first supposed by many that the year 1951 was another instance of the same kind, a year for stop-gap measures to give the European coal industry time to adapt itself to changed conditions. There is little reason any longer for believing this to be true. It is certainly the case that part of the increase in demand for coal in 1951 arose from the desire to make good the depletions of stocks which had occurred in some countries in 1950: to that extent demand in 1951 exceeded the trend-line. On the other hand, in the circumstances of the year it is improbable that this desire to replenish stocks could in fact be consummated in all cases. More important, if industrial production continues to expand, there can hardly help—other things being equal—but be a continued increase in the demand for coal for industrial consumption, and the rises in personal incomes which such an expansion should make possible are likely to call forth a demand for better standards of heating in the home.

It is known to be the intention of Governments in all parts of Europe that industrial output shall expand during the next five years at a rate comparable with

<sup>1</sup> Throughout this chapter, Europe is defined as excluding the Soviet Union.

<sup>2</sup> It is impossible to measure with any precision the extent of a country's dependence on particular primary fuels for its supplies of heat and motive power. The amount of energy latent in a unit of each primary source of energy (solid fuels, liquid fuels, natural gas and water power) can be measured. But the amount of usable heat or motive power actually generated by solid and liquid fuels varies with the efficiency of the apparatus in which the combustion takes place, and with the way in which it is used: only about 7 per cent of the energy latent in gasoline is used to drive a car, perhaps 6 per cent of the energy latent in coal is effectively used in a steam locomotive, the efficiencies of two furnaces burning the same type of coal may vary from 70 to 25 per cent, as much as 80 per cent of the energy latent in coal may be lost in the process of generating electricity. There are also losses of electricity, whether hydraulically or thermally generated, in the process of transmission to consumers. Moreover, all these factors change over time as the design of combustion apparatus changes. Any attempt to estimate the total amount of artificial heat and motive power actually used in any economy must therefore make heroic assumptions. The figures in Table 70 (the derivation of which is fully explained in the "Notes to the Statistics") must thus be regarded only as extremely rough orders of magnitude. The story which they tell would, however, hardly be greatly changed if more refined calculations were possible.

<sup>3</sup> France, which has more hydro-electricity than the other big industrial countries, is the only exception.



Table 70

HEAT AND MOTIVE POWER CONSUMED

Country	Year	Total  ( <i>Quadrillions of calories</i> )	Per capita  ( <i>Billions of calories</i> )	Proportion of total obtained from				
				Solid fuels <sup>a</sup>	Fuel wood	Liquid fuels	Natural gas	Hydro- elec- tricity
Poland, pre-war boundaries . . . . . post-war boundaries . . . . .	1929 1949	88 116	3 5	88 95	7 2	2 2	3 1	— —
Belgium and Luxembourg . . . . .	1929 1949	91 74	11 8	98 93	— —	2 7	— —	— —
United Kingdom . . . . .	1929 1949	400 469	9 10	95 90	— —	5 10	— —	— 1
Western Germany . . . . .	1929 1949	312 297	7 6	92 87	2 3	1 3	— —	5 7
Ireland . . . . .	1929 <sup>b</sup> 1949 <sup>b</sup>	11 11	4 4	92 79	.. ..	8 14	— —	— 7
Netherlands . . . . .	1929 1949	36 45	5 5	93 83	— —	7 17	— —	— —
Denmark . . . . .	1929 1949	15 20	4 5	89 75	— 2	11 20	— —	— 3
France and the Saar . . . . .	1929 1949	269 254	7 6	82 72	4 5	3 10	— —	11 13
Austria . . . . .	1929 1949	30 32	4 5	67 54	5 5	3 5	— 3	25 33
Portugal . . . . .	1929 1949	5 8	1 1	45 37	42 31	7 21	— —	6 11
Italy . . . . .	1929 1949	90 99	2 2	39 26	8 7	4 11	— 2	49 54
Sweden . . . . .	1929 1949	48 76	8 11	34 21	21 9	4 13	— —	41 57
Finland . . . . .	1929 1949	19 27	6 7	14 16	68 47	— 6	— —	18 31
Switzerland . . . . .	1929 1949	28 36	7 8	27 14	3 5	3 7	— —	67 74
Norway . . . . .	1929 1949	44 55	16 17	15 9	4 3	2 7	— —	79 81
Total Europe . . . . . (excluding U.S.S.R.) . . . . .	1929 1949	1,823 1,983	5 5	81 73	5 5	3 8	0 1	10 13
United States . . . . .	1929 1949	4,372 5,000	36 34	37 26	3 3	49 45	10 25	1 1

NOTE. — The figures in this table are derived from Table A in "Notes to the Statistics". The assumptions made in the calculations are fully explained there. The European countries have here been listed in the order of their degree of dependence, in 1949, on solid fuels for supplies of heat and motive power.

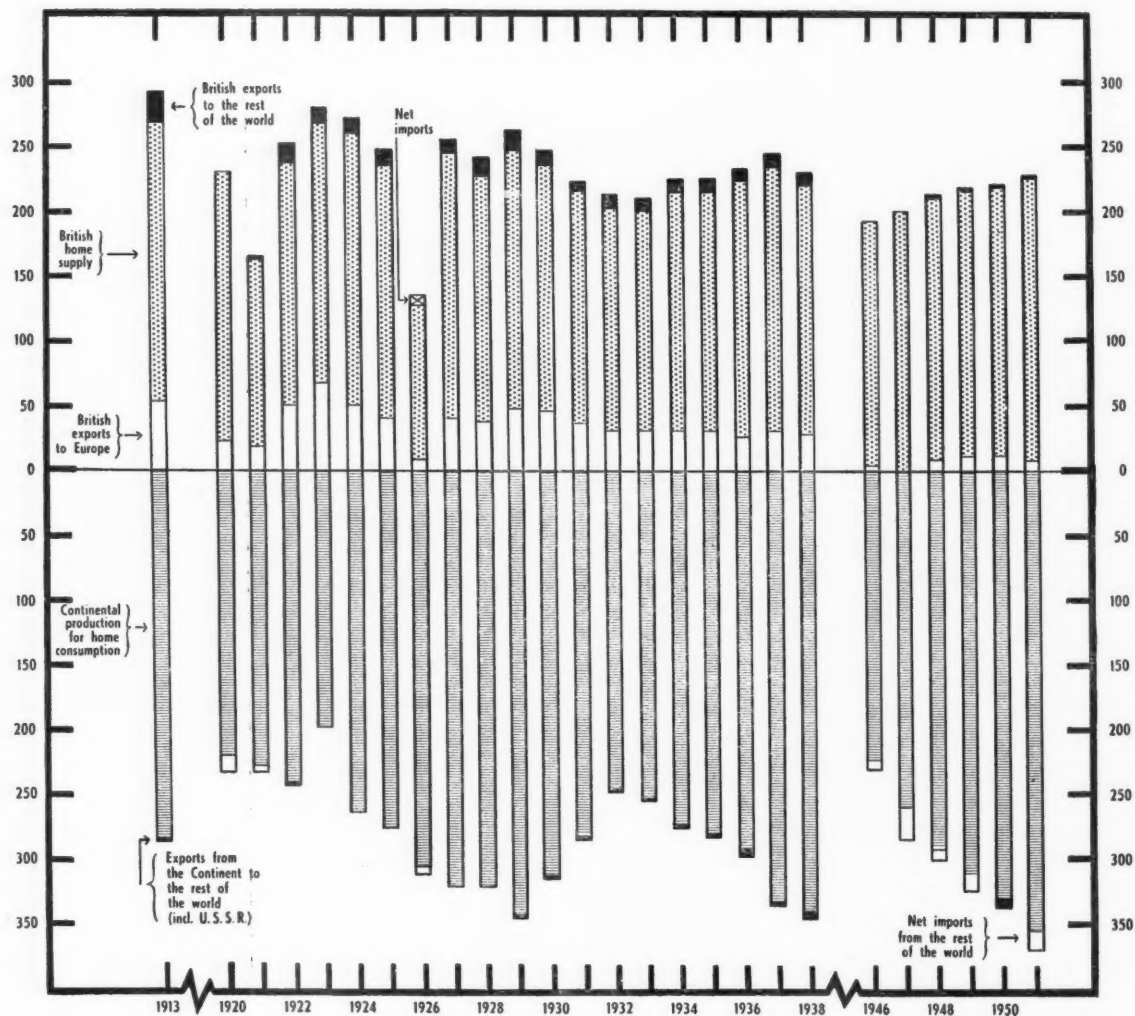
<sup>a</sup> Coal, lignite and peat.

<sup>b</sup> The percentages shown are somewhat too high because of the lack of information on fuel wood.

Chart 7

COAL PRODUCTION AND TRADE : GREAT BRITAIN AND REST OF EUROPE

Millions of tons



Sources : See "Notes to the Statistics".

that witnessed in the last five years. Unless considerable economies are made in the use of fuel of all kinds there is bound to be a concomitant increase in energy consumption. If this increase is not balanced by a rise in the output of indigenous fuels and hydro-electricity sufficient, not only to cover the further increases after 1951, but also to replace the imports of 1951, imports of fuel will have to continue, probably on an increased scale. Whether these imports take the form of coal or of oil is a problem of less importance.

The coal problem can thus be re-stated in a more general form. Europe's production of energy from indigenous sources—mainly coal, water-power and natural gas—has failed to keep pace with its demands. Because of the traditional dependence of most European countries on coal as a source of energy, this failure is now showing itself in western Europe as an import of coal from the United States, and in eastern Europe as a narrow bottleneck limiting progress in industrialization.

Table 71

PRODUCTION, TRADE <sup>a</sup> AND AVAILABLE SUPPLIES OF HARD COAL, SELECTED YEARS, 1929-1951  
Millions of tons

Year	UNITED KINGDOM <sup>b</sup>				OTHER WESTERN EUROPE					EASTERN EUROPE <sup>c</sup>		
	Pro-duction	Exports	Imports	Available supplies	Pro-duction <sup>d</sup>	Net imports from United Kingdom	Net imports from eastern Europe	Net imports from other countries	Available supplies	Pro-duction	Net exports to western Europe	Available supplies <sup>e</sup>
1929 . . . .	262	61	—	201	252	45	8	-1	304	93	8	85
1937 . . . .	244	41	—	203	253	31	8	-2	290	84	8	76
1947 . . . .	201	1	1	201	180	1	7	34	222	81	7	74
1951 . . . .	226	8	1	219	252	7	10	25	294	106	10	96

Sources : SURVEY for 1948 and SURVEY for 1950, Economic Commission for Europe; Monthly Bulletin of Coal Statistics, Economic Commission for Europe, and national trade statistics.

<sup>a</sup> Excluding bunker coal.

<sup>b</sup> Excluding Northern Ireland.

<sup>c</sup> Excluding the U.S.S.R.

<sup>d</sup> Including German pitch coal.

<sup>e</sup> Including supplies to the U.S.S.R. of approximately 8 to 9 million tons a year in the post-war years and small net exports to overseas countries in the pre-war period.

The way in which this situation affects different groups of countries varies, of course, with their industrial structure and their possibilities of expanding the production of other sources of energy. The exporting countries can gain some immediate relief of their coal problem—at the expense, perhaps, of forgoing supplies of some of the goods which they obtain in exchange for coal—by cutting down their exports <sup>1</sup> and diverting supplies to internal use. This course has already been followed in 1951 by the United Kingdom.

Polish exports of coal to western Europe have been maintained since the war at about the same level as that of exports from the same geographical area before the war. This continuance in the post-war world of the traditional trade patterns has been of great value to both western and eastern Europe. But it can hardly survive in the face of increased demands from the rapidly industrializing economies of eastern Europe and the Soviet Union <sup>2</sup> unless the western countries continue to have attractive counter-deliveries to offer or unless Polish production keeps pace with eastern

Europe's demand. The recent breakdown of the Polish-Danish trade negotiations may be a straw in the wind in this connection. Polish coal made up 4 per cent of western Continental Europe's total supplies in 1951 and 25 per cent of the importing countries' purchases, so that its loss would be a serious blow to the western countries.

But even should east-west trade continue at something approaching its present level, the gap between western Europe's needs and the supplies obtainable from European sources is likely, as far as can be judged, to widen rather than to narrow during at any rate the next five years. The Governments of the OEEC group of countries have agreed to aim at an increase of 25 per cent between 1951 and 1956 in the gross national product of the whole area. Even on the assumption that this target is hit, no close estimate of the implied increase in coal consumption could be calculated without far more information than is at present available both on the industrial composition of the projected increases and on the degree of firmness with which policies designed to secure fuel economy will be pursued. In order to form some rough idea of the size of the problem which policy has to solve, it has here been assumed, first, that the global aims are achieved (without any radical change in the relative importance of coal-intensive and coal-extensive industries), and, second, that present utilization, price and rationing policies are

<sup>1</sup> The volume of coal exports from the Ruhr is fixed by the International Authority for the Ruhr. This arrangement will come to an end when the Schuman Plan is in operation.

<sup>2</sup> The Soviet Union is believed to be importing some 8 million tons of coal annually from Poland now; before the war the Baltic countries, East Prussia and the parts of Poland now incorporated in the Soviet Union imported about 3 million tons from the west. The net loss since the war to Europe in the narrow sense is thus about 5 million tons a year.

not greatly changed. (It will emerge from the subsequent discussion that these two assumptions are almost certainly inconsistent.)

An increase in western Europe's<sup>1</sup> output of goods and services over 5 years by 25 per cent would, if specific energy consumption continued to fall at the same rate as over the last generation, probably involve an increase of some 20 per cent in the total consumption of energy.<sup>2</sup> If one-third of this increase—a generous estimate—were in the form of low-grade fuel, hydro-electricity, natural gas and oil, western Europe's demand for coal in 1956 would be 590 million tons. It would then still be far lower *per capita* than present consumption in the United States, but it would be 80 million tons higher than the supplies available in 1951.<sup>3</sup>

It is difficult to believe that western European coal production can rise as much as this without some change in the plans and outlook of the major coal producers. The National Coal Board of Great Britain published as recently as October 1950 a forward-looking document<sup>4</sup> setting out the Board's

programme of reconstruction of the British coal industry. It would appear from this, and from the trend of production since the document was published, that production in 1956 might, on present plans, be some 5 million tons higher than in 1951.<sup>5</sup> From Germany more can probably be expected. If the trend of the last few years, when the worst effects of the war had already been removed, were to continue, the western German mines would produce some 40 million tons more in 1956 than in 1951. The other western European countries, which together produce about as much as western Germany, would, on the assumption of a continued upward trend at a somewhat reduced rate, increase output by 15 million tons.

Altogether, production in western Europe might, if present policies were adhered to, be 60 million tons<sup>6</sup> higher than in 1951 and the gap between demand and the supplies available from Europe would actually be widened by 20 million or, if Polish exports disappeared, by 30 million tons. In the worst case, this would imply imports from the United States of over 50 million tons in 1956.

Such an upheaval of the traditional pattern of trade in coal would, of course, affect some countries more severely than others. Those in the strongest position would be, as now, the coal exporters, the United Kingdom and western Germany, which would be able to soften the direct blow to their own economies by cutting down their exports. The margin which the United Kingdom has is, however, already slender: the total British exports of coal were only 8 million tons in 1951. Some of the importing countries would be in a position only slightly less strong because they dispose of materials which they can withhold from export except in return for coal. The bargaining strength of particular importers, in a world in which coal sales are largely a matter of bilateral negotiation, is often strong towards one exporter even when weak

<sup>1</sup> The European countries whose Governments are members of the Organization for European Economic Co-operation and Spain.

<sup>2</sup> Over the period 1913 to 1947 there appears to have been a fall of about 1 per cent per annum in the amount of energy consumed per unit of output in both the United Kingdom and the United States. This can be derived, for the United Kingdom, from data on energy consumption, and from indices of industrial production given in W. Hoffmann, *Weltwirtschaftliches Archiv*, Vol. 40 (1934), page 398, the *League of Nations Statistical Yearbook* for 1939 and the *Economic Survey of Europe in 1950*. For the United States, see H. J. Barnett, *Bureau of Mines Circular* 7382, "Energy Uses and Supplies, 1939, 1947, 1965".

<sup>3</sup> The group of experts which recently reported to the OEEC on the implications for coal consumption of a gross national product 25 per cent higher than in 1951 estimated an increase in apparent consumption in the OEEC countries of only 54 to 64 million tons. (See *Coal and European Economic Expansion*, OEEC, Paris, January 1952.) On the face of it this looks surprisingly low. The OEEC report appears to assume that, under the stimulus of a tight coal situation, improvements in fuel efficiency will be made at a faster rate during the next few years than has hitherto been normal. If this does not happen, the target set for industrial production can, indeed, hardly be met. But it seems unsafe to assume that such an acceleration can be relied on to occur without extraordinary measures by Governments.

<sup>4</sup> *Plan for Coal*, The National Coal Board's Proposals, London, October 1950. The introduction to this document states that the Plan "settles a strategy for investment, . . . shows what would happen in the industry only on certain assumptions about the unknown future", and "will undergo continuous revision." In paragraph 75, it is claimed that "the programme of the next few years is in any case a maximum that could not be expanded even if the planned output for 1961-65 were much higher." This could hardly be true, however, unless there were some completely unbreakable bottleneck which limited the Board's capacity either to invest more capital or to recruit more labour.

<sup>5</sup> The results of the year 1951 were above the trend line of the Board's extrapolations partly because of a once-for-all increase in the number of shifts worked on Saturdays. The Board appears to have contemplated a rise of about 2½ million tons a year as a result of changes in capital and labour employed. Since the publication of *Plan for Coal* it has been agreed that miners shall be granted a second week's holiday, which, it is estimated, will cost 4 million tons of coal a year. The output of deep-mined coal might thus be 8 or 9 million tons higher in 1956 than in 1951. Open-cast production, however, is likely to fall by perhaps 4 million tons.

<sup>6</sup> This is very close to the estimate of production made by the OEEC group of experts, though its distribution by countries differs.



with respect to another. It remains to see what difference will be made to these bargaining strengths when the Schuman Plan is in operation. In all circumstances it seems that Austria and Denmark will be among the countries which will be worst hit if Europe's present dependence on American coal continues, unless steps are taken through the international allocation machinery which at present operates to share the burden more equitably.

There is no doubt that the under-employed American coal industry would be glad to supply this coal.<sup>1</sup> Nor would its transportation present insurmountable difficulties. Some of the difficulties so far experienced in carrying American coal to Europe and unloading it<sup>2</sup> have arisen because the trade was thought of as an abnormality for which it was not worth while to adjust transport facilities. Similarly, the landed cost of American coal in Europe has been relatively high—sometimes as much as \$25 a ton—largely because the shipments were made in response to rush orders which permitted no advance planning of production at the mines and no timely reservation of shipping space. If the trade were organized on a permanent basis, with relatively long-term contracts and at any rate the partial use of European bottoms for carriage, it seems possible that the average dollar cost of American coal could be reduced to an average of \$12 a ton, and the total cost to \$15, which would make it no more than the cost of production of coal from marginal mines in Europe.<sup>3</sup>

If, indeed, it were a deliberate policy to rely increasingly on imported fuels it might be more economical to encourage the substitution of oil for coal.<sup>4</sup> The

<sup>1</sup> The United Mineworkers' Union of the United States was recently reported to have presented to the Administration a plan to reduce shipping charges sufficiently to permit imports into Europe of 80 million tons a year at a cost comparable to the European inland price.

<sup>2</sup> In 1951 some American coal destined for the United Kingdom had to be transferred to coasters in Continental ports because British ports are not well equipped to unload coal from high-seas vessels.

<sup>3</sup> If it were accepted policy that Europe should regularly import coal, there would be no reason for it to restrict its purchases to the United States. But although South African production has increased by more than 50 per cent since 1938 and India's output is 20 per cent up, so far only small quantities of relatively inferior coal have come, mainly as ballast, from these countries to Europe.

<sup>4</sup> At present, the costs of importing a calorie of latent energy seem to be much the same whether the import is in the form of crude oil (after allowance for refinery costs and losses) or of coal, but in general a greater percentage of the latent energy can actually be used in the case of oil than in the case of coal. A reduction in the cost of coal imports of the kind discussed would of course reduce the advantage enjoyed by oil.

main problem, however, is not how the prices of imported coal or oil compare, at present rates of exchange, with one another or with European marginal production costs, but whether Europe can afford a substantial addition to its import bill, particularly when the bulk of it would have to be paid in dollars, or whether it would not be preferable to bridge the gap by taking more vigorous measures both to expand the production of coal and to economize in its use. Evidence is given in Sections 3 and 4 of this article for the belief that great savings in consumption could be made if Government policies in the field of energy were properly co-ordinated. There is no doubt, too, that production could be stepped up in the major coal-mining countries (though not in every case in a matter of months) if those directing the industry were convinced that they would find a long-term continuing market for their increased output.

This confidence appears to be lacking. Thus, in the British *Plan for Coal* the demand for British coal for exports and bunkers in the years 1961-1965 is put at 25 to 35 million tons a year—that is, at less than the demand of the 'thirties. The inland demand in the same years is put at 208 to 218 million tons, or 9 to 19 million tons higher than in 1949, the year before the *Plan* was published. But in 1951 consumption was already 12 million tons higher than in 1949.

These figures make it evident that, rightly or wrongly, those directing the British coal industry have been assuming a world in which both the British and the Continental demand for coal would expand far more slowly than is contemplated by some Governments and generally agreed to be possible.<sup>5</sup>

A second and more specific example of this lack of confidence on the part of coal-producers was provided in 1949/50. A small improvement in the European supply position, which had an admittedly disproportionate—but by the same token temporary—effect on buyers' attitudes, was sufficient to make the French Government cut the nationalized coal industry's investment programme.

It is obvious that short-period fluctuations in demand have to be reckoned with in the future, as in the past. But the answer to these, if they are merely fluctuations about an upward trend, is not deliberate restrictionism, which would avoid unemployment

<sup>5</sup> The words, "taking one year with another", which qualify the estimate of export demand, suggest, moreover, that the Board is assuming a continuance of the pre-war sequence of boom years and slump years rather than an orderly expansion.

among miners in bad years only at the expense of coal shortage in good years, but rather some attempt to insulate mining employment from such hesitations of demand. This would imply a willingness on the part of both coal exporters and coal importers to carry higher stocks than is now normal.<sup>1</sup> It would imply concerted efforts to spread the burden of temporary unemployment among miners.<sup>2</sup> It would imply using opencast production of hard coal and lignite, which demands less highly specialized workers and more readily transferable plant than deep mining, as a reserve to be tapped only in years of high demand. Finally, it would imply greater concentration on development work and rationalization in the bad years.

But it may be suggested that coal-producers have a more valid reason for scepticism. The gap spoken of above was calculated on the hypothesis that

<sup>1</sup> The existence of longer-term export contracts would force part of this responsibility on to the importing countries; if they are unwilling to bear it they can hardly blame the exporting countries for setting their production sights too low. Hitherto, however, it has been the exporting countries which were reluctant to enter into long-term contracts.

<sup>2</sup> As between different pits in the same country, this is already possible in cases where there is a single control of the whole industry. (Thus, in France in 1950, short time was worked, but no miners were laid off.) But it may be just as desirable as between different countries: investment in the existing Belgian mines might be a cheaper way of increasing Europe's peak capacity to produce coal than investment in new shafts elsewhere, but such investment can hardly be expected as long as the Belgian industry has to bear the main brunt of hesitations of demand.

## 2. COAL PRODUCTION TRENDS AND POLICIES

Europe's production of hard coal in 1951 was higher than in any previous year except 1929.<sup>3</sup> This represents a recovery of 40 per cent in output since 1946. One-third of the increase came from the recovery of output in the western German fields from the exceptionally low level of 1946, but there have been significant rises in all the producing countries: even in Great Britain, where output had never collapsed as on the Continent, there has been an increase of 17 per cent during the past five years. The annual rates of increase in Europe have declined since the immediate post-war years, but still averaged over 3½ per cent in the last two years.<sup>4</sup>

<sup>3</sup> This was the peak year for Europe as a whole, but for no individual country; everywhere except in Great Britain output was higher in at least one subsequent year. See Table 72.

<sup>4</sup> The proportionate increase in 1951 was greater than this, but that was partly because production in 1950 had in some countries been held back by the only slackening in the demand for coal since the war.

western Europe's gross national product would rise over the next five years by 25 per cent. It may be objected that this calculation takes the target set too seriously; that apathy on the part of some Governments may well hold the actual achievement down to a far lower level sufficient to enable Europe to do without American coal not merely by 1956, but in the near future, even though present coal production plans are not revised upwards. Would it not therefore be pointless to leap into the dark before there is stronger concrete evidence that more than lip-service is being paid to the target announced?

There are three answers to this. First, if sufficient coal is not forthcoming, the goal cannot be reached in any event, unless at the expense of overseas imports—which would undo most, if not all, of the gains of the higher output. This risk is so much greater than the risk of over-investment in coal-mining that on these grounds alone investment would be a prudent policy. Second, investment planned to expand coal production will, in the case of insufficient demand, always permit the production of coal at lower cost than before. Third, even countries which could export more coal only by diverting resources from other export industries would probably improve their bargaining position and so their balance of payments if they were able to offer other countries coal rather than supplies of less essential manufactured goods.

Chart 8 shows the movement over the post-war period of the factors determining production—number of men, output per man-shift and number of man-shifts worked—in four of the western European producing countries. It will be seen that the curves of total output in the four countries resemble one another more closely than the curves of the constituent factors.

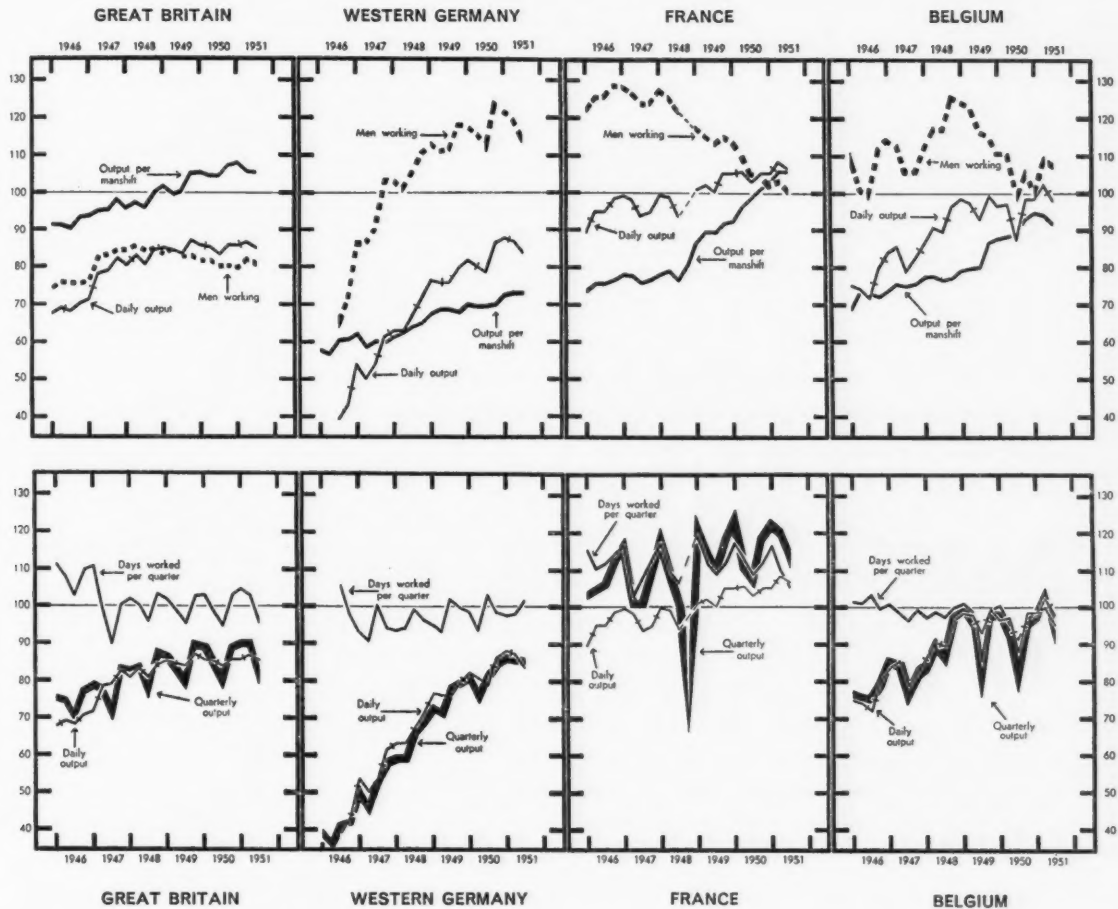
### *Great Britain*

British production of hard coal in 1951 was 7 per cent below the level of 1937, the best year of the 'thirties: 11 million tons, however, came from opencast workings which were not exploited before the war and will soon be exhausted if they continue to be exploited at the present rate. The output of deep-mined coal, which is the more significant indicator of the British industry's activity, was still 16 per cent below the output of 1937.

Chart 8

MANPOWER, PRODUCTIVITY AND DAYS WORKED IN HARD-COAL MINING (UNDERGROUND), 1946-1951

Index numbers—1937 = 100



Sources: See "Notes to the Statistics".

NOTE. — In the upper half of the chart, daily output is shown as the product of manpower and productivity; in the lower half, quarterly output is shown as the product of daily output and number of days worked.

Output per man-shift, which had never fallen as much as in the immediate post-war chaos on the Continent, has risen steadily since the war and is now running 7 or 8 per cent above the pre-war peak level of 1936. This must be attributed largely to investment and rationalization; the improvement in labour relations which followed the nationalization of the industry has also undoubtedly played some part in increasing the effort of the miners.

The number of shifts worked per quarter fell sharply in 1947, when the 5-day week was introduced; this was, however, largely compensated by a fall in absenteeism, which, moreover, did not increase even after voluntary Saturday working was introduced later in the year. In 1951 the number of man-shifts worked on Saturdays was higher than in any year since 1947.

The really striking development in Great Britain, however, has been the continuance in the post-war

years of the long-standing downward trend of manpower. The number of miners, apart from a spurt upwards in the early part of 1951, has fallen almost continuously since early 1948. The difficulties facing the British industry can, in fact, all be summed up under a single rubric as the difficulty of attracting labour, both manual and technical, to undertake dirty and sometimes dangerous work in an industry with a uniquely bad pre-war record of employment<sup>1</sup> and labour relations, at a time when the opportunities for easier and more congenial work in other industries without unpleasant historical associations are unprecedentedly great.

The Government and the National Coal Board have already done much to increase the attractiveness of the miners' lot: miners' wages have several times been

increased, a 5-day week has been granted, a pension scheme has been introduced, extra food rations have been issued, an injuries insurance scheme more generous than that operating in other industries has been started, canteens and pithead baths have been built, miners have been exempted from liability to military service. But the proof of the pudding is in the eating: although the miner has now for several years been paid more than other industrial workers (and although in particular the wages of juvenile workers are high compared with what beginners in other industries can command), the differential has obviously not been great enough if judged by its efficiency in stimulating recruitment to and discouraging migration from the industry.

The suggestion is sometimes advanced that these facts demonstrate the ineffectiveness of wage stimuli: it is often said that each successive wage increase brings some improvement in recruitment for a few months (the increases in November 1950 and February 1951 are the latest examples of this<sup>2</sup>), but that the curve of manpower after a time always resumes its downward trend. The reason for this appears rather

<sup>1</sup> The history of coal production in Europe since the first World War is in large part a history of the almost continuous decline in the importance of Great Britain. This is so whether one uses as indicators the total tonnage got (as in Table 72), the numbers of men employed in the industry, or output per man-shift.

In 1913, 1.1 million men (and in 1920 as many as 1¼ million) were employed in the British mines and about the same number in the Continental coalfields. By 1937, as Table 73 shows, the number had fallen in Britain by 330,000 and was about 150,000 less than the number of Continental miners. Moreover, those miners who remained in work found that they were no longer the best-paid, but among the worst-paid of industrial workers.

<sup>2</sup> A further increase in wages was announced in December 1951; between the beginning of December and mid-January 1952 the total number employed rose by about a thousand a week. It is, of course, too early to see yet whether this represents a reversal of the previous trend.

Table 72  
OUTPUT OF HARD COAL  
Millions of tons

Year	Great Britain <sup>a</sup>	Western Germany <sup>b</sup>	Poland <sup>c</sup>	France <sup>c</sup>	Belgium	Czechoslovakia	Saar	Netherlands	Other Europe <sup>d</sup>	Total Europe
Peak year	1913 (292)	1939 (140)	1943 (92)	1930 (55)	1937 (30)	1943 (25)	1943 (16)	1937 (14)	.. ..	1929 (607)
1913 . .	292	119	58	44	23	14	13	2	13	578
1920 . .	233	92	42	24	22	12	9	4	13	452
1925 . .	247	109	49	47	23	13	13	7	14	522
1929 . .	262	131	74	54	27	17	14	12	16	607
1937 . .	244	138	65	44	30	17	13	14	16	580
1947 . .	201	71	59	45	24	16	10	10	24	461
1948 . .	213	87	70	43	27	18	13	11	24	505
1949 . .	219	103	74	51	28	17	14	12	25	543
1950 . .	220	111	78	51	27	18	15	12	25	557
1951 . .	226	119	82	53	30	19	16	12	28	584

Sources: See "Notes to the Statistics".

<sup>a</sup> Including opencast production.

<sup>b</sup> Excluding pitch coal.

<sup>c</sup> Present boundaries.

<sup>d</sup> Including pitch coal mined in western Germany.



Table 73

NUMBER OF MEN EMPLOYED IN HARD-COAL MINING (OVER-ALL)

Yearly averages

Thousands

Year	Great Britain <sup>a</sup>	Western Germany	Poland <sup>b</sup>	France <sup>b</sup>	Belgium	Czecho-slovakia	Saar	Netherlands	Total of countries listed
1913 . . .	1,107	394	182	203	146	64	51	10	2,157
1920 . . .	1,227	494	..	207	160	75	70	23	2,456 <sup>c</sup>
1925 . . .	1,086	434	197	309	160	62	70	30	2,348
1929 . . .	932	384	208	295	151	58	57	36	2,121
1937 . . .	778	302	139	224	143	43	44	31	1,704
1947 . . .	711	317	192	320	160	62	41	39	1,842
1948 . . .	724	355	202	284	177	63	62	40	1,907
1949 . . .	720	376	198	275	164	..	61	42	..
1950 . . .	697	391	..	259	157	..	60	42	..
1951 . . .	699	402	..	245	156	..	58	44	..

Sources: See "Notes to the Statistics".

<sup>b</sup> Present boundaries.

<sup>a</sup> Excluding opencast.

<sup>c</sup> Including estimate of 200,000 for Poland.

Table 74

OUTPUT PER MAN-SHIFT IN HARD-COAL MINING (OVER-ALL)

Kilogrammes

Year	Great Britain <sup>a</sup>	Western Germany	Poland <sup>b</sup>	France <sup>b</sup>	Belgium	Czecho-slovakia	Saar	Netherlands
1913 . . .	1,090	935	1,090	695	528	970	843	820
1920 . . .	739	625	..	..	484	557	..	582
1925 . . .	904	933	970	563	472	819	680	837
1929 . . .	1,102	1,251	1,270	694	576	1,009	836	1,247
1936 . . .	1,195	1,665	1,740	860	794	1,311	951	1,826
1937 . . .	1,186	1,587	1,738	833	782	1,404	1,054	1,774
1947 . . .	1,091	928	1,216	591	584	1,082	..	1,297
1948 . . .	1,124	958	1,327	..	603	1,086	763	1,362
1949 . . .	1,179	1,048	..	702	641	..	844	1,407
1950 . . .	1,213	1,067	..	770	693	..	961	1,425
1951 . . .	1,228	1,103	..	849	743	..	1,043	1,427 <sup>c</sup>

Sources: See "Notes to the Statistics".

<sup>b</sup> Present boundaries.

<sup>a</sup> Excluding opencast.

<sup>c</sup> 11 months.

to be that after a few months other workers, too, improve their position, so that the relative wage of the miner drops somewhat. If the mining labour force is to be prevented from declining indefinitely, it seems clear that some means will have to be found of keeping miners' wages in a more or less constant ratio to other

earnings. In an industry such as coal-mining, where productivity may well rise more slowly than elsewhere, this may imply actually raising average rates of wages (both piece-rates and time-rates) from time to time to offset the decline in miners' relative earnings which would otherwise occur.

Such a policy is bound to run the risk that increases in numbers in the industry will be bought at the expense of increases in absenteeism or reductions in effort, as a result of a preference for leisure on the part of heavy workers. But the risk must be faced.

The policy often advanced as a substitute—the introduction of foreign immigrants into British mines—may have attracted disproportionate attention. It is, in fact, not an alternative, but could be a useful complement. It is a matter of great regret, from a British as well as from a Continental point of view, that the reluctance of the British workers to allow foreigners to work with them has reduced the inflow of Italians to a mere trickle.<sup>1</sup> It has never been suggested that foreign labour should be used to keep British miners' wages low or British labour unemployed. The unwillingness of many miners' lodges to accept their leaders' assurances on this point may have a more general significance as being symptomatic of a lack of confidence of the men in their leaders, both managers and trade union officials.

In dealing with such problems of industrial relations, as in other respects, the industry is handicapped by a shortage of capable men at the higher managerial levels, both technical and administrative. Mechanized mining demands large numbers of technical experts, rationalization schemes demand strong planning staffs at both the national and the regional level. These were not among the assets which the National Coal Board took over when the industry was nationalized. It must be remembered that managers who are today in their forties entered the industry at its most depressed period, when recruitment was low, and that for most of their working lives they have often been employed by small, under-capitalized firms, in conditions in which they had no opportunity to think about, still less to plan and operate, large investment projects. The National Coal Board is clearly aware of this problem, and in the long run its schemes of education and promotion (the so-called "ladder plan") should contribute greatly to a solution. But in the meantime, unless recruitment from outside the industry can be accelerated, a situation apparently without parallel

<sup>1</sup> The total number of foreign workers placed in the British mines since 1947 is about 18,000, or (assuming that they are all still there) 2½ per cent of the total employed. Most of these were refugees or "displaced persons". After long-drawn-out discussions a scheme for recruiting Italians was introduced at the beginning of 1951; by the end of the year there were 760 in the pits. In Belgium, by contrast, 42 per cent of those employed in the mines are foreign workers.

in the coal-mining industries of other countries exists, in which investment programmes are held down, not by financial limitations, but by a lack of men capable of conceiving and carrying out reorganizations of pits and coalfields. In public discussion of the problem of management in the industry, much attention has been paid to the relative merits of centralization and decentralization, but little to the more fundamental problem of attracting the best brains to the industry.<sup>2</sup> This managerial bottleneck may, however, be more serious than the more highly publicized shortage of manual labour.

### *Western Germany*

Output in western Germany is below pre-war production, as in Great Britain, but for a different reason. Labour is comparatively plentiful, and the number of miners is much higher than in 1937 or even 1929. Productivity, however, shows only a slow upward trend, and it would take 15 years or so to regain the 1937 output per man-shift if nothing were done to improve the rate of increase.<sup>3</sup>

Many reasons have been given for the low productivity of German miners, some of which cannot be regarded as sufficient, because they apply also to other countries where output per man-shift is nevertheless rising faster than in Germany. Thus, it is said that there was little development work in the war years and even in the 'thirties; but everywhere it was the "easy" coal that was got during the war. It is pointed out that few new shafts have been sunk for many years and that new workings in the existing mines have to be made at deeper levels every year, so that the coal has to be transported a greater distance to the surface and miners have to work in higher temperatures: the same is unfortunately the case elsewhere.<sup>4</sup> It is said that the coal produced is dirtier than it was before the war,<sup>5</sup> so that the ratio of clean

<sup>2</sup> All the indications are that the industry as a whole has a lower percentage of salaried employees in the higher income brackets than other industries or than coal industries in other countries. This is not the result of nationalization but of the sad state of the industry before it.

<sup>3</sup> Productivity in 1951 was 17 per cent higher than in 1913, exactly as in Great Britain.

<sup>4</sup> In some mines, however, the critical temperatures at which the length of the shift has to be reduced have been reached, as the German mines are comparatively deep; this has not occurred to the same extent in other countries.

<sup>5</sup> A dirt ratio of 21 per cent has been quoted for 1951, as against 12.5 per cent in 1936. (See A. Grosse-Boymann, *Glückauf*, 87 (1951), page 420.)

and saleable coal to the total got is lower ; this development, which is a result partly of mechanization and partly of the exploitation of poorer seams, is complained of in all countries. Finally, it is pointed out that the prosperity of the Ruhr causes a high labour turnover and so a high proportion of inexperienced workers. This is a common complaint in all areas where there is full employment of labour.

There are, however, other and more special reasons for the low productivity. Four in particular stand out : the distorted age-distribution of the mining labour force, the appalling housing conditions in the Ruhr district, the uncertainty hitherto as to the ownership of the mines themselves and the propaganda from some quarters against producing coal for export.

About the first of these, very little can be done in the short term. The same complaint is heard in Great Britain, where, as Table 75 shows, the proportion of older men among the mining workers is significantly higher than it was in 1937. The ageing was here a result of the long depression of the industry and the concomitant fall in new entrants. But in Germany the shift has clearly been even greater, and the deficiency in the most productive age-groups (30 to 45) is serious. In this respect the mining population

resembles the west German working population as a whole to-day. If recruiting of young men continues at recent rates, however, the western German industry will in 10 or 15 years have a higher proportion of men in the more productive age-groups than the coal industries of other countries.

The housing shortage has undeniably serious effects. One-eighth of the miners in the Ruhr are living away from their families : this must inevitably cause absenteeism. More important, perhaps, is a constant seepage of men from the industry when the chance of a house in another district or one owned by a steelworks crops up. Labour turnover is thus high <sup>1</sup> for reasons which do not always apply in other countries.

The third reason is a more subtle one. It is *prima facie* difficult to see why the mining engineers (of whom there is no scarcity in the Ruhr district) should allow uncertainty as to the ultimate ownership of the coal mines to interfere with their desire to have a technically efficient industry. The point may well be

<sup>1</sup> In 1950, underground miners on piece-rates in the Ruhr showed a turnover of 23 per cent of their total; the 1951 situation is said to have been worse. See H. H. Bischoff, "Arbeiterzahl und Förderanstieg im west-deutschen Steinkohlenbergbau", *Glückauf* 87 (1951), page 563.

Table 75  
AGE DISTRIBUTION OF UNDERGROUND COAL MINERS  
Percentages

Age groups	Great Britain			Ruhr		France	Belgium	
	Average for 1937 <sup>a</sup>	10 Dec. 1949 <sup>a</sup>	10 Dec. 1949	Mid-1939	Mid-1950	1 Jan. 1950	1 Jan. 1939	1 Jan. 1949
14-17 . . . . .	9.1	3.3	2.0	3.0	2.3	3.9	} 5.8	6.3
18-20 . . . . .	4.8 <sup>b</sup>	3.7	3.5	4.2	9.2	8.7		
21-25 . . . . .	13.7 <sup>c</sup>	10.7	11.4	4.0	17.9	19.5	9.4	21.4
26-30 . . . . .	12.6	12.5	13.6	12.8	12.4	18.5	15.4	19.6
31-35 . . . . .	13.0	} 23.0	24.4	21.0	7.3	10.6	19.6	13.8
36-40 . . . . .	11.6			22.3	9.9	12.2	19.3	13.8
41-45 . . . . .	9.4	} 23.8	24.1	13.8	13.3	11.0	13.7	10.8
46-50 . . . . .	8.2			9.7	13.9	9.3	8.9	8.2
51-55 . . . . .	6.9	9.0	8.7	7.0	7.9	4.8	5.8	4.0
56-60 . . . . .	5.5	7.0	6.4	1.9	3.9	1.4	1.4	1.6
61-65 . . . . .	3.1 <sup>d</sup>	4.1 <sup>d</sup>	3.5 <sup>d</sup>	0.3	2.2	} 0.1	0.6	0.5
66 and over . . .	2.1 <sup>e</sup>	2.9 <sup>e</sup>	2.2 <sup>e</sup>	0.0	0.1			

Sources : See "Notes to the Statistics".

<sup>a</sup> Above and below ground.

<sup>b</sup> Ages 18 and 19.

<sup>c</sup> Ages 20 to 25.

<sup>d</sup> Ages 61 to 64.

<sup>e</sup> Ages 65 and over.

that, wishing to put the mines into good shape for their ultimate owners, whoever they may be, managers have given an undue priority to development work and reorganization, which will result in higher production later, but implies less coal-getting now. Some increase would in any case be necessary if higher output is to be achieved in the future. This conflict between immediate needs and future needs is one which arises in all coal-producing countries.

The fourth reason suggested for low productivity is even more difficult to weigh. All that is certain is that some leaders of opinion have publicly argued that there was little point in raising coal output as long as the level and price of coal exports was fixed by an international authority and not by Germans; that any increase in production would probably result in the fixing of a higher export quota. How much effect the expression of this point of view has had on managers' attitudes and miners' efforts it is, of course, impossible to judge.

Of all these factors, only the first—the distortion of the German population's age-distribution—is outside human control. Of the others, the housing shortage is probably the most important. On present plans this should be greatly relieved in the course of the next two years. The housing programme comprises 46,000 dwelling-units for miners in both 1952 and 1953, of which nearly 40,000 are to be erected in North-Rhine-Westphalia. Assuming no reduction in other house-building<sup>1</sup> (which would largely undo the effect of the miners' programme) the target implies a considerable, but not impossible, rise in building output.

More directly, miners' productivity is being stimulated by wage incentives. Considerable attention is being paid to proposals to free from income tax, which has a fairly high marginal rate, the earnings from higher output. This seems an unnecessarily complicated way of subsidizing the mining industry; if it is believed that the industry cannot pay sufficiently high marginal wages, and that the price of coal cannot be raised, a subsidy would seem preferable to interference with a direct tax system which has a more general concern with the distribution of the national income.

<sup>1</sup> The total number of dwelling-units completed in North-Rhine-Westphalia was 70,000 in 1949, 120,000 in 1950, and perhaps 140,000 in 1951.

A considerable investment programme, which waits only on the provision of finance, is now under way. This includes provision for the deepening of existing shafts, the finishing of a number of new ones already half sunk, the mechanization of 40 faces and the installation of power plants burning low-grade fuel. Although productivity should be raised by these investments, and perhaps even more by the greater concentration on the most productive faces which is now planned, it appears to be thought necessary still to increase the labour force from its already high level.

In order to finance these investment plans, the most complicated schemes<sup>2</sup> have been thought out (involving the use of E.R.P. counterpart funds and even specific tax reductions) which are nevertheless not basically different from the more explicit State financing adopted in France and the United Kingdom. The need for special finance for the mining industry in western Germany arises from the fact that—in a system of generally free prices—the price of coal, like those of steel and housing, remains controlled: mining is thus apt to be less attractive than other industries to the investor and also less able to finance its own investment out of ploughed-back profits.

#### *France*

The daily output of French mines (most of them nationalized since the war) has shown the same slow upward trend as the British output, and for the same reason—a rise in output per man-shift, partly offset by a fall in numbers.<sup>3</sup>

The resemblance is, however, superficial only. Whereas in Britain the fall in employment has taken place in spite of the efforts of the Government and the National Coal Board, in France it was, over a part of the period, a deliberate object of policy to bring about such a fall. In the first months of 1950, when British miners were working an extra Saturday shift in response to ministerial appeals, the French mines,

<sup>2</sup> Part of the cost of the programme of miners' houses is to be financed out of a tax of DM 2, or some 5 per cent of the price, on coal. Firms in most industries are to be forced to contribute to a loan to finance investment in the heavy industries; as their contributions are to be based partly on their profits and partly on their gross turnover, even firms using no coal at all will have to contribute. Each of the new steel companies formed in the process of de-cartelization is to be combined with one or more coal mines so that these large consumers will directly finance their own supply of coal.

<sup>3</sup> The decrease at the end of 1948 is attributable mainly to the departure of German prisoners of war.



faced with rising pit-head stocks and the necessity for short-time working,<sup>1</sup> were refusing to recruit any but underground workers, and then only if they were the sons of miners.

Whereas in Britain rises in productivity are looked upon as desirable primarily because they permit increases in total output, in France they have been aimed at mainly in order to reduce costs. Thus, although immediately after the war French production targets and investment programmes were set very high, these were soon reduced and in 1950 a 25 per cent cut was made in the whole programme of pit construction and modernization. The previously planned extension of production capacity by 34 million tons was reduced to 26 million tons, which still represented an increase of one-half above current output. The reduction in the cleaning plant programme, however, was only 14 per cent, mainly accounted for by deferment of work at new pits. The whole revision of the investment programme was clearly slanted to take account of a cut in the output targets of the industry without impairing the strengthening of the competitive position of the French coal industry which had earlier been planned. This attitude reflects the fact that France has always been a net importer of coal, the greater part of whose own production cannot easily compete with British and German coals.

In the second half of 1950, after it had become apparent that the pithead stocks which had mounted in such a threatening way earlier were to disappear only too soon and that in periods of scarcity imports could not be relied upon, a reversal of policy took place. Recruitment was resumed and higher investment targets were again set. There is said to be no bottleneck in the provision of the necessary capital goods, nor does a lack of engineers limit the speed of operations. The programme set for 1952 nevertheless seems to be of about the same size as that realized in 1951.

### Belgium

The Belgian coal-mining industry differs from those in other western European countries in that its ownership is scattered over some 80 companies which are still largely independent of the State, as

regards both their day-to-day production policy and their investment funds.<sup>2</sup> The southern and central Belgian mines are, moreover, marginal producers<sup>3</sup> particularly susceptible to the ups and downs of the European coal market. They were largely protected from the slump of the early 'thirties by restrictions on the import of coal into Belgium: when the Schuman Plan is in operation, such restrictions will in the end be impossible, and unless special measures are taken the mines are unlikely to attract much further private capital. Such investment as has occurred since the war has been almost entirely in housing, power plants, cleaning plants, electrification of winding and other installations above the ground.

The most striking post-war development in the Belgian mines is the way in which the total number employed has been consistently higher since the war than in 1938, even though the number of Belgians employed in the mines has been one-fifth to one-quarter lower.

*Number of Workers in the Belgian Mines<sup>a</sup>*  
(End of year — Thousands)

	Belgians	Italians	Other foreign workers	Prisoners <sup>b</sup>	Total
1938 . . .	123	5	20	—	148
1945 . . .	99	2	11	45	158
1946 . . .	95	19	12	39	165
1947 . . .	97	30	34	2	163
1948 . . .	100	46	30	1	177
1949 . . .	101	35	27	—	163
1950 . . .	97	30	25	—	153
1951 <sup>c</sup> . . .	90	44	22	—	157

Source: *Bulletin de Statistique*, Institut national de statistique, Brussels, October 1951, page 1766.

<sup>a</sup> Workers on the books.

<sup>b</sup> Prisoners of war and persons detained for political offences.

<sup>c</sup> At 30 September.

By admitting foreign workers, mainly Italians, in boom times and stopping their recruitment when demand weakens, Belgium has been able to maintain the flexibility necessary to a marginal industry. In the meantime, output per man-shift has risen steadily, both when employment was increasing and when it was falling, but is still below the pre-war peak.

<sup>2</sup> In 1947, however, Government intervention in the field of pricing had some indirect influence on investment; an increase in prices was approved only on condition that part of the proceeds (45 francs per ton in the Campine mines and 35 francs in the other fields) was used for re-equipment.

<sup>3</sup> The coal is found in deep-lying, gassy, rather thin, broken seams surrounded by unstable, heaving ground.

<sup>1</sup> On the average, 7 working days were lost to production during the first six months of 1950.

## Poland

The output of the Polish coal-fields recovered fast after the war, and by 1949 was already as high as in the pre-war peak year, 1929. Output per man-shift was then probably somewhat above the 1929 level, though still about 20 per cent below the level reached in 1936 and 1937. Since 1949, output has risen by a further 10 per cent, but it is not known how much of this increase is attributable to increases in manpower and how much to improvements in productivity. The intention, when the Six-year Development Plan for the years 1950 to 1955 was drawn up, was that manpower should remain constant, and that an increase in output of 35 per cent—about the same as that aimed at in France, but considerably more ambitious than the British programme—should be achieved between 1949 and 1955 through rises in productivity resulting mainly from mechanization, for which the exceptionally thick Polish seams are very suitable. If the plan is fulfilled, output per man-shift (over-all) will reach a level of 1,800 kilogrammes at the end of the period, 4 per cent higher than in the peak year 1936 and nearly as high as the record level attained in the Netherlands in that year.

## Investment Programmes

Output per man-shift in Europe, in the period between 1913 and 1937, rose by more than 1 per cent per annum on the average, notwithstanding the shortening of the working day. This figure compares favourably with progress made, in the same period, in American deep mines; it is, however, smaller than the average rise in productivity in manufacturing industry, which has been of the order of 2 per cent per annum or more. Much of the increase is attributable to the gradual mechanization of all mining operations, but the part played by rationalization has also been important. In Great Britain, the introduction of mechanical cutters and conveyors was probably the factor mainly responsible for the increase of 10 per cent in output per man-shift achieved between 1913 and 1936. But because the dispersed ownership of the British mines prevented rationalization on the scale possible in the Ruhr, output per man-shift—in 1913 the highest in Europe—was in 1936 no more than 70 per cent of that attained in the Ruhr.

The size of its investment programme alone is therefore an insufficient measure of the effort made by

any particular country to increase coal production.<sup>1</sup> Moreover, it is certain that the investment programmes of the various countries do not have the same coverage.<sup>2</sup> Nevertheless, a broad comparison of the investment programmes of the main producing countries, even though each figure is subject to many qualifications, seems legitimate. It seems from Table 76 that the investment effort of Great Britain is proportionately much smaller than that of France: this is remarkable when looked at side by side with the exceptionally serious manpower situation in Great Britain.<sup>3</sup>

Only in some cases are figures available on the profitability of particular types of investment. In every case the cost of the extra coal likely to be got, at pithead prices, is smaller than the excess of the present cost of American imports over local pithead costs. Thus, in France, the modernizations classified as "grands travaux"<sup>4</sup> are expected to cost, on the

<sup>1</sup> Nor, of course, is there any reason why each country should try to expand its production in the same ratio. Some fields, particularly those in the south of Belgium, are geologically less suited than others to produce the necessary increase. Some of these differences are illustrated by the following data:

*Average Depth and Thickness of producing Coal Seams*

	Depth	Thickness
	(Metres)	
Great Britain . . .	360	1.20
Western Germany .	700	1.50
France . . . . .	420	1.20
Belgium . . . . .	800	0.80
Poland . . . . .	325	3.50

<sup>2</sup> Thus, the Belgian figures seem to exclude development work (such as the driving of galleries) while the French "travaux à moyen terme" expressly comprise this expenditure. In the case of Great Britain the larger projects, such as underground roads connecting existing workings, are included. The coverage of the western German figures is uncertain. If there is to be any rational discussion of the relative merits, from a European point of view, of increasing investment in coal-mining in one country rather than in another, some improvement in statistical comparability is essential.

<sup>3</sup> It has been estimated that, before the war, a 1 per cent increase in labour employed by itself gave an increase in output of about three-quarters of one per cent, and that a 1 per cent increase in capital employed, if labour were kept constant, gave an increase in output of one-quarter of 1 per cent in Great Britain—that is, that the production function of coal was of the form  $P = k L^{0.75} C^{0.25}$ , where  $P$  represents output,  $L$  labour,  $C$  capital and  $k$  a constant related to the efficiency of management and effort of labour. (See K. S. Lomax, *Journal of the Royal Statistical Society*, Series A (General), Vol. CXIII, Part III, 1950, page 346.) Later calculations suggest that this relationship has held since the war too, but that whereas  $k$  was less than unity before the war, it has been greater than unity since.

<sup>4</sup> Commissariat général du Plan de modernisation et d'équipement: *Etat des opérations du plan de modernisation et d'équipement à la fin de 1950*, Paris, 1951.

**Table 76**  
**GROSS INVESTMENT IN HARD-COAL MINING**

Country	In national currencies						In millions of dollars of 1950 purchasing power					Output in 1951 (Millions of tons)
	Unit	1947	1948	1949	1950	1952 (Plan)	1947	1948	1949	1950	1952 (Plan)	
United Kingdom <sup>a</sup> . .	Million £	16.2	23.5	29.7	26.9	38	64	87	108	96	110	212
Western Germany . .	Million DM	..	..	..	300	675	..	..	..	78	147	120
of which in power plants		..	..	..	..	230	..	..	..	..	50	
France . . . . .	Billion frs.	16	33.7	52.9	54.9	60	105	129	179	168	148	53
of which in power plants		5	9.3	14.2	18.5	21.3	33	36	48	57	53	
Belgium . . . . .	Million frs.	650	1170	1160	1060	2400 <sup>b</sup>	12	21	20	17	32 <sup>b</sup>	29
of which in power plants		..	..	380	260	..	..	..	7	4	..	

Sources : See " Notes to the Statistics ".

NOTE. — The figures exclude miners' dwellings and cokeries.

<sup>a</sup> Excluding opencast.

<sup>b</sup> Subject to reduction if private capital is not forthcoming.

average, 8,500 frs. per ton of annual production increase—that is, roughly three times the difference between the present c.i.f. price of U.S. coal and the average French pithead price, so that the investment cost will be recouped in three years. In western Germany, it has been stated<sup>1</sup> that the mechanization of a face

<sup>1</sup> M. Schensky, "Die neueren Ergebnisse der mechanisierten Kohलगewinnungspunkte im Vergleich zu handbetriebenen und die daraus zu ziehenden Folgerungen für die Förder- und Leistungssteigerung," *Glückauf* 86 (1950), page 1179.

raises its output by one-half ; as the cost of this mechanization would generally be about DM 40 per ton of annual output, or DM 120 per additional ton, while the difference between average pithead cost in the Ruhr and the landed cost of American coal is some DM 40, this type of investment too would earn back its cost in three years (assuming that transport and preparation facilities were available to handle the increased production).

### 3. COAL CONSUMPTION TRENDS AND POLICIES

The amount of coal needed by Europe is not a fixed datum objectively determined by the level and composition of industrial output and the level of real income.

#### *Substitution of Other Sources of Energy for Coal*

In the first place, as Table 70 illustrated, there has been over the past two decades an appreciable substitution of other primary sources of energy for coal, and this may well continue. It is obviously desirable that water-power resources should be exploited as intensively as possible : in particular, it is desirable that countries with unused water resources should increase their hydro-electric capacity rather than add to their stock of thermal power plant, even if the capital cost of hydraulic power is higher per unit of output than the capital cost of coal- or oil-burning plant.<sup>2</sup>

<sup>2</sup> This is a case where national interests may differ from those of electricity concerns run for profit.

Some of the countries with abundant water power are already so little dependent on coal that no substantial direct contribution to European coal economy is possible from them. But a development of international trade in hydro-electricity would contribute indirectly to coal savings by permitting the intensified exploitation of water power in countries where the local demand for electricity is already adequately met.

The substitution of oil for coal raises rather different considerations. It would not necessarily reduce dollar expenditure. Moreover, some Governments may well be reluctant to derive too great a proportion of their countries' energy supply from a source from which they may be cut off in war-time and which is, in any case, controlled by private international monopolies. There can, however, be no doubt that the adaptation of combustion equipment so that it can be used to burn either oil or coal would impart a useful flexibility which would save countries from the worst consequences of acute temporary shortages of solid fuels.

# *The Scope for Saving Coal by Improving Combustion Efficiency*

Second, coal can be saved by improving the efficiency with which combustion apparatus is used. Both the scope for such savings and the methods most appropriate for carrying them through differ considerably as between the different types of consumer.

It will be seen from Table 77 that in the three biggest coal-consuming countries of western Europe—Great Britain, western Germany and France—some 35 to 40 per cent of the solid fuels used in 1950 went to the electricity, railway and iron and steel industries. These are all industries to which the cost of coal is such an important part of their total costs that in competitive conditions they would have a strong incentive to bring the efficiency with which their fuel installations are used to something approaching the technical optimum.<sup>1</sup> The problem of inducing fuel economy in such industries can therefore be subsumed under the more general problem of devising

conditions in which industries usually organized as domestic monopolies can be induced to keep their total costs down rather than to take the convenient view, common in sellers' markets, that rises in costs do not matter because they can always be passed on to the ultimate consumer of their products in the form of increases in price.<sup>2</sup>

In the coal-producing countries, an appreciable part of the total coal produced is consumed by collieries themselves in providing motive power. It is generally admitted that in all too many cases the combustion apparatus used is obsolete. A programme of modernization would bring considerable savings. But the more important question which is everywhere being considered now is whether means cannot be devised for reducing to a minimum the

average calorific value declined by 5 per cent between 1939 and 1949.)

## *Coal Consumption in Electricity Generation*

	1930	1939	1949
Netherlands <sup>a</sup> . . . . .	0.68	0.54	..
United Kingdom <sup>b</sup> . . . . .	0.91	0.61	0.63
United States <sup>c</sup> . . . . .	0.74	0.64	0.58

<sup>a</sup> Based on electricity sent out : about 5 per cent is used or lost in the power plant. (See *Jaarcijfers voor Nederland*, 1940.)

<sup>b</sup> Based on electricity generated. (See Ministry of Fuel and Power Statistical Digest 1949, and *Report and Accounts of the British Electricity Authority*, 1950/51.)

<sup>c</sup> Based on electricity generated. (See United States Bureau of Mines, *Minerals Yearbook*, 1949.)

<sup>2</sup> What is said above all refers to the efficiency with which existing apparatus is used. In all cases, of course, the replacement of all existing plant by the most up-to-date plant would improve fuel efficiency.

<sup>1</sup> There have been big improvements in coal utilization both in the iron and steel industry and in generating stations over the last few decades. Thus, the British Iron and Steel Federation estimates that it took 3.14 tons of coal to produce a ton of finished steel in 1923, as against 1.81 tons in 1939. (See *Report and Accounts of the National Coal Board for 1950*, page 33.) There is still, however, scope for making better use of by-product gas. The following figures are available for electricity generation : they take no account of changes in the calorific values of the coal used. (It is known that in the United Kingdom the

**Table 77**  
CONSUMPTION OF SOLID FUELS BY SECTORS, 1950  
*Millions of tons*

	HARD COAL AND PRODUCTS					LIGNITE AND PRODUCTS
	Great Britain	Western Germany <sup>a</sup>	France	Belgium	Netherlands	Western Germany
Collieries <sup>b</sup> . . . . .	10.9	11.6	4.7	2.7	1.2	16.4
Power plants <sup>c</sup> . . . . .	32.3	8.9	7.5	2.8	2.7	21.5
Railways . . . . .	14.5	9.7	6.4	1.6	0.6	0.5
Iron and steel industry . .	25.6	16.2	12.8	4.8	0.8	2.6
Other <sup>d</sup> . . . . .	116.5	42.6	32.3	14.0	9.8	33.3
Total . . . . .	199.8	89.0	63.7	25.9	15.1	74.3

Source : *Monthly Bulletin of Coal Statistics*, Economic Commission for Europe.

NOTE. — Coke and briquettes are given in terms of the hard coal or lignite required for their production.

<sup>a</sup> Including pitch coal.

<sup>b</sup> Excluding miners' coal and coal consumed by power plants selling electricity to others.

<sup>c</sup> Including collieries' power plants selling electricity to others.

<sup>d</sup> Including miners' coal, industrial, commercial and domestic uses and bunkers.



consumption of saleable coal by collieries.<sup>1</sup> This will be discussed later.<sup>2</sup>

There remains the field of miscellaneous industrial, commercial and household consumption, which accounts for about half of the total consumption in each of the five countries for which figures are given in Table 77. There is undoubtedly great scope in this field for saving fuel and using existing apparatus more efficiently.

The most notorious example of fuel-wasting is, of course, the open fireplace dear to British hearts. Estimates of the amount of heat lost up the chimney or remaining as unburnt coal in the residual ash vary from 75 per cent to 90 per cent.<sup>3</sup> It cannot be doubted that a policy which successfully encouraged the replacement of open fireplaces by closeable stoves would make it possible to maintain the average temperature of British houses with a consumption of coal several million tons less than at present. But this could not be done overnight or without considerable cost, even if the steel needed were in plentiful supply. Moreover, unless coal rationing were maintained indefinitely and allocations to households cut to the extent of the saving, there would probably be little or no net economy, in view of the considerable scope that exists for raising standards of comfort.<sup>4</sup>

In the meantime, there are possibilities of saving coal in industrial uses which are more immediately alluring both because they could be achieved at negligible social or private cost and because the saving in each individual case may be considerable.

Every fuel efficiency expert can quote innumerable cases where the application of nothing more than a little common sense has resulted in a notable saving of fuel to industrialists. Often, this has involved merely better stoking, the stopping up of leaks, the

proper control of draught, the use of simple insulation devices and the like. For any case where such savings have already been achieved, there is notoriously a legion of others where the saving is still to be made. Estimates of the total reduction in consumption which could be achieved without radical changes in combustion equipment are naturally highly conjectural. It has been estimated<sup>5</sup> that in the Netherlands the universal adoption of sound stoking practices alone would reduce industrial consumption of coal by 5 per cent and that if better use were made of steam a further reduction of 5 per cent could be achieved. It is the experience of the official Fuel Efficiency Branch of the British Ministry of Fuel and Power that reductions of 20 to 25 per cent can nearly always be achieved.<sup>6</sup>

It is not at all surprising that this should be so. In most industries everywhere fuel costs represent only a small proportion of total manufacturing costs. The following figures illustrate the position in the United States in 1947: it is certain that if equally comprehensive statistics were available for other countries they would tell the same story.

*Fuel Costs in United States Manufacturing Industries in 1947*

	<i>As a proportion of value added in each group of industries</i>	<i>As a proportion of the total fuel bill of manufactures</i>
	<i>(Percentages)</i>	
Blast furnaces, steel works and rolling-mills . . . . .	40	32
Other fuel-intensive industries <sup>a</sup>	11	29
All other manufacturing industries . . . . .	2	39
	4	100

<sup>a</sup> Industries where the ratio of fuel costs to value added is over 5 per cent. The most important in terms of fuel consumption were the brick, glass, pottery, cement, paper and ironfounding industries.

The contrast between the iron and steel industry and even the other relatively fuel-intensive industries is striking. In the third group of industries, which consumed nearly 40 per cent of the total fuel used in manufacturing, the financial spur to cut fuel costs must be extremely blunt, even if their products are sold under highly competitive conditions. Moreover, industrial-

<sup>1</sup> The National Coal Board, in *Plan for Coal* (page 73), makes the point that, until this is normal colliery practice, 5 million tons per year of saleable coal will, in effect, be wasted in Great Britain, but seems somewhat cautious about the possibilities of making quick adaptations of the furnace plant at collieries.

<sup>2</sup> See page 173.

<sup>3</sup> In making the calculations underlying Table 70, it was assumed that the open fireplace has an efficiency of 15 per cent.

<sup>4</sup> At present, 45 per cent of British houses have no running hot water, and the proportion is certainly higher in some other countries.

<sup>5</sup> See *Report of the Committee for Fuel Saving*, 1951.

<sup>6</sup> See *Report and Accounts of the National Coal Board for 1950*, page 33.

ists who have accustomed themselves to disregarding fuel costs are not in a position quickly to change their practices : their fuel engineers, if any, are likely to be relatively low down in the management hierarchy and, because engineers' training has given relatively little weight to the study of fuel-saving techniques, not always well qualified.

The problem of achieving greater economy in the industrial use of fuel is thus a problem of bringing pressure on industrialists to apply the well-known results of modern fuel technology. There are at least three possible ways of doing this—by education and propaganda ; by the use of price policy; and by discriminatory rationing.

#### *Education and Propaganda*

In most countries, a considerable use of the first method has been made : exhortation to consumers has been combined with appeals to the technical conscience of plant engineers. In general, however, the provision of technical advice seems to have been left too much to the private initiative of institutions financed by the contributions of business firms. Only in the United Kingdom has the Government itself taken the responsibility for testing factories' furnace plant, boilers and other installations and for giving technical advice on how firms' fuel bills can be cut. There is no compulsion on firms to ask for advice, but the smallness of the Ministry's staff of engineers (itself a function of the scarcity of qualified personnel) would in any case make compulsory powers useless in the short term.<sup>1</sup>

Expenditure on fuel advice and training can pay social dividends out of all proportion to its cost. These dividends will be maximized if the expenditure is applied in a discriminating manner. In an economy where coal prices are encouraged or allowed to rise in relation to other prices, it may be that the advice will bring the best return in the form of coal saved if it is directed towards the industries whose demand for coal will normally be the least sensitive to price changes. But in economies where coal prices are kept down artificially it is likely that better returns will be obtained by concentrating attention on the middle group of relatively coal-intensive industries.

<sup>1</sup> In France and Italy, where the Government has powers to inspect the heating installations of factories and to enforce improvements, the shortage of engineers seems to have prevented their extended use.

#### *The Price Policies of European Governments*

It is sometimes suggested that the most effective way for Governments to bring about fuel economies would be for them to encourage a rise in the price of fuel relatively to other prices. The argument in its most sophisticated form is that even if increased fuel costs are passed on to consumers, fuel-intensive goods and services will become dearer, relatively to others, than before, and (though only to the extent that demand for them is price-elastic) less in demand. Thus, even should an increase in fuel prices set off a cost-inflation, some reduction in fuel consumption would be brought about.

Such a policy has been pursued by no European Government. On the contrary, Governments have striven to keep the price of coal down, sometimes at the cost of subsidies, which are still continued in France. It has often been urged in justification of this policy that, though the direct weight of coal in the cost of living is small, a rise in the price of a commodity which enters so universally into all costs of production is bound to have cumulative repercussions far greater than the original influence. This argument appears to be based on a fallacy : in general, each of the successive secondary effects of a rise in the price of coal—the rise in transport costs, which itself raises the cost of steel, which in turn increases mining costs, and so on—will be smaller than its predecessor, so that the final rise in the general level of costs resulting from an initial increase in the price of coal will not be great unless coal costs are themselves a high proportion of total costs before the change. This does not appear to be the case in any European country.

#### *Ratio of Coal Consumption<sup>a</sup> to National Income in 1950*

(Percentages)

Belgium . . . . .	7.0	Ireland . . . . .	2.6
Western Germany . . . . .	5.8	Sweden . . . . .	2.2
United Kingdom . . . . .	4.1	Norway . . . . .	1.8
Netherlands . . . . .	3.6	Italy . . . . .	1.3
Denmark . . . . .	3.2	Switzerland . . . . .	0.8
Spain . . . . .	3.0	Greece . . . . .	0.2
France . . . . .	2.9		

<sup>a</sup> Apparent consumption of hard coal and lignite, valued at pithead price or landed cost at port of entry. The sources of the figures are given in "Notes to the Statistics".

The ratio of coal costs to national income varies from country to country; but even in Belgium, where the iron and steel industry—a heavy coal-consumer—

bulks larger in the economy than in the other countries for which figures are shown, it was no higher than 7 per cent in 1950. There is thus no particular reason to fear cost inflation from a rise in the price of coal, except in economies where prices are so unstable that any rise in one price might set all the others in motion.<sup>1</sup>

But the smallness of the ratios is a double-edged argument which may justify Governments' policies. As was pointed out earlier, in most industries in most countries, fuel costs, whatever their absolute level, are a minute proportion of total costs; it would be unreasonable to suppose that firms' demand for coal would be sensitive to small changes in their total costs, whether the increase has to be absorbed by industry or can be passed on to consumers in the form of a fractional rise in prices. It may therefore be that the saving of coal which would follow a deliberate increase in coal prices would be so small that Governments have been wise to regard it as less important than general price stability.<sup>2</sup>

An alternative price policy, which would have kept average costs down while forcing those industrial consumers who were sensitive to price increases to curtail their consumption, would of course have been a policy of price discrimination between different classes of consumers. But in most countries the complications inherent in such a policy (to say nothing of its apparent unfairness) have prevented it from being seriously considered.<sup>3</sup> In countries dependent on imports, price equalization funds have often been used to ensure that each type of coal shall sell at a single price, irrespective of its origin. In general, in coal-producing countries all industrial consumers have been charged the same price for each grade of coal, and the range<sup>4</sup> and general level of coal prices have

been fixed subject to the limiting conditions that the total revenue of the coal mines shall not greatly exceed their total costs and that the price of imported coal shall be the same as that of indigenous coal. As wage-payments make up a high proportion of total mining costs, this policy has meant that the price of coal in producing countries is, in effect, determined by the bargaining position of miners as against mine-owners and other groups of workers.

Western Germany appears to be the only western European country where price discrimination has been followed. This dates from August 1951, when a rise in the average price of coal had become necessary in order to cover increases in miners' wages; this rise, it was feared, would encourage a general increase in all prices if it were applied equally to all consumers. The original thought was that for certain industries—primarily those with a high ratio of fuel costs to total costs—the price of coal would be left unchanged; others, which could afford to absorb an increase, were to be permitted to get an allotment of coal over and above their normal entitlement at a price DM 35 above the list price; still a third group were to be permitted to get a further supplement of United States coal if they were prepared to pay an economic price for it. So far, so good: it might well be argued that coal-intensive industries were already more fuel-conscious than the average, and that the coal-extensive industries might by these means be gently prodded into exercising greater economy. But political and juridical obstacles prevented the scheme from being realized in the form in which it had been conceived. Now that it is in operation, there are in effect three prices of coal—the list price, which is paid by the highly coal-intensive public utilities and by the food industries and households; an average of the list price and the *Spitzenpreis* (DM 35 higher); and an average of the list price, the *Spitzenpreis* and the price of United States coal—and the highest of these three is the one paid by the most coal-intensive industry of all, the iron and steel industry.<sup>5</sup> The discontinuance of this experiment is now reported to be under consideration.

<sup>1</sup> For the same reason, the fear often expressed by manufacturers that rises in the price of coal would seriously damage their competitive power in export markets is generally greatly exaggerated.

<sup>2</sup> To the extent that the maintenance of low prices for coal has inhibited the substitution of oil, the demand for coal has, of course, been kept higher than it would otherwise have been. But, as was suggested in Section 1, a mere substitution of imported oil for imported coal would not necessarily be of clear advantage to all countries.

<sup>3</sup> In the United Kingdom the Coal Industry Act, 1946 (Section 2 (b)), specifically excludes the possibility of its adoption.

<sup>4</sup> The relativity of the prices of different types of coal has been neglected in this discussion: it is an important subject, but not of the first order for the general coal problem.

<sup>5</sup> To complete the story it should be added that the supplement of DM 35 a ton is distributed to the individual coal-mining companies, not in proportion to the excess of their current production over their output in the base period, as was originally contemplated, but in proportion to their total output. Mines which achieve no increase thus get a reward for their failure, as long as other mines succeed in increasing their output, while mines which succeed in increasing output get little reward for this if others lag behind.

**Table 78**  
**AVAILABLE SUPPLIES OF SOLID FUELS IN EUROPE, 1929-1950**  
*Millions of tons*

Country		1929	1937	1946	1947	1948	1949	1950
Austria . . . . .	Coal	6.7	3.7	2.0	2.5	4.6	5.1	4.7
	Lignite	4.0	3.4	3.8	4.8	5.3	6.0	6.1
Belgium and Luxembourg . . . . .	Coal	39.9	36.1	29.3	30.2	31.6	30.3	28.7
Denmark . . . . .	Coal	6.1	7.3	4.4	4.7	4.1	5.6	7.5
	Peat	0.4	0.4	3.7	5.2	3.6	1.4	..
Finland . . . . .	Coal	1.3	2.4	1.1	1.7	2.5	1.4	2.0
France . . . . .	Coal	94.3	74.6	58.3	62.3	64.4	73.3	63.7
Western Germany <sup>a</sup> . . . . .	Coal	91.9	92.5	43.6	61.6	69.3	81.5	87.2
	Lignite	66.6	69.4	47.5	58.0	61.1	67.5	74.3
Great Britain . . . . .	Coal	195.2	199.0	187.8	200.1	200.8	201.9	198.9
Ireland . . . . .	Coal	2.6	2.4	1.6	1.8	1.9	1.9	2.2
	Peat	3.6	3.6	4.1	4.1	3.8	3.6	2.5
Italy . . . . .	Coal	15.0	13.9	6.9	10.8	9.2	10.2	9.6
Netherlands . . . . .	Coal	15.4	15.5	10.5	13.0	13.3	14.6	15.5
Norway . . . . .	Coal	3.3	3.9	2.1	2.9	2.3	1.9	2.0
Portugal . . . . .	Coal	1.3	1.6	1.0	1.3	1.2	1.4	1.2
Spain . . . . .	Coal	9.3	7.9	10.4	10.3	11.1	11.7	11.8
Sweden . . . . .	Coal	7.2	10.4	4.6	6.8	7.9	7.1	8.6
Switzerland . . . . .	Coal	3.5	3.7	1.6	2.3	2.8	2.0	2.7
	Lignite	0.8	0.6	0.1	0.4	0.3	0.3	0.5
Total of countries listed . . . . .	Coal	493	475	365	412	427	450	446
	Lignite	71	73	51	63	67	74	81
Total Europe . . . . .	Coal	591	567	422	486	511	541	546
	Lignite	219	223	208	221	242	266	282

Sources: See "Notes to the Statistics".

NOTE. — Coke and briquettes are given in terms of the hard coal or lignite required for their production. Discrepancies between the 1950 figures

given above and those in Table 77 are due to changes in stocks and small differences in definition.

<sup>a</sup> Including pitch coal.

### Allocation Schemes

It might have been supposed that, having rejected price policy as a weapon to enforce economy in the use of coal, Governments, particularly those with a tradition of direct controls, would have used rationing or allocation schemes to the same end. But there is no evidence that this has anywhere even been tried, and some evidence that, at any rate in countries where the ration has been fairly generous, any positive influence of the system on consumption has been malignant rather than benign. This has been partly because of the difficulty in judging the efficiency of different consumers as users of fuel, but in some cases also because they have found it convenient to use coal allocation schemes as instruments of other policies of

a more general nature. Thus, in all countries which have had allocation schemes,<sup>1</sup> the demands of certain classes of consumers—the collieries themselves, public utilities (gas, water and electricity undertakings) and railways—have been met in full. The justification for this was that the products of these industries affected the production of all other goods and services and that no limits were placed on their output.<sup>2</sup>

<sup>1</sup> In France, the allocation scheme in operation was wound up when the coal situation eased in 1949. The present allocation scheme in western Germany was introduced during the winter of 1950. Great Britain has had an allocation scheme since 1940.

<sup>2</sup> The only exception to this was in the case where a final service affecting only final consumers was in question: from time to time in certain countries passenger train services have been curtailed in order to reduce the railways' demand for coal.



Household consumers<sup>1</sup> almost everywhere were treated harshly, because their consumption could be cut drastically without any direct repercussion on industrial production.

In allocating the remaining coal among different industrial consumers, both the administrative techniques used<sup>2</sup> and the criteria followed differ from country to country. In the United Kingdom, there has been no discrimination between industries. In western Germany, all food industries get a high quota, because the maintenance of food supplies is regarded as of paramount importance; the ceramic industry's quota is high because it is labour-intensive; some consumer-goods industries have low quotas because their products are regarded as unimportant. From a fuel-efficiency point of view such criteria are obviously irrelevant; it may well be important to ensure the bread supply, but it seems unnecessary to stimulate the production of coal-intensive *pain de luxe*; lamp shades may well be judged unimportant, but if their manufacture consumes relatively little fuel no great saving will be gained by forcing the workers making them to become unemployed. But there is no reason to believe that the application of these criteria affects the average fuel efficiency of the economy in anything but a random way.

In neither country has there been any attempt at discrimination between efficient and inefficient fuel-users. The effects of this neutral attitude may have been somewhat worse in the United Kingdom than in western Germany, in spite of the technical superiority of the British allocation scheme, because the British supply situation has hitherto been easier: except in February 1947, when the onset of the worst winter in

half a century drained away stocks of coal and brought industrial production to a standstill, lack of coal does not appear so far to have kept down the output of any branch of British industry, though firms have often not been able to buy coal of the types which they would have preferred. Moreover, while for obviously good reasons both industrial and household consumers have been encouraged to buy ahead of need in the summer months, the foolish virgins who start the winter with inadequate stocks, because they have consumed imprudently, far from being punished for their lack of foresight or public spirit, tend to be rewarded by supplementary allocations to keep them going.<sup>3</sup>

It might well be argued that it is unfair to criticize existing allocation schemes for not tending to promote fuel economy, as they were not brought into being for this purpose, but rather to prevent a general shortage from manifesting itself in the form of haphazard hold-ups of particular firms' production.<sup>4</sup> All that is here suggested is that it would be worth while for Governments to face squarely the difficulties inherent in finding an adequate basis for discrimination between firms within, at any rate, the main coal-intensive industries.<sup>5</sup> Assessments of the fuel needs of particular firms—which vary with the nature of their output, the number of shifts worked, the age and type of their combustion apparatus and the availability of alternative sources of energy—would admittedly be arbitrary, and a large number of special cases would have to be admitted, at any rate for the time being.<sup>6</sup> But the arbitrariness would be no greater than that produced by the existing neutral allocation schemes, and there could not fail to be a significant saving of fuel.

<sup>1</sup> With whom were generally grouped shops, offices and others who used coal mainly for heating purposes.

<sup>2</sup> In western Germany, the Government fixes each quarter the allotment for each industry, expressed as a certain percentage of its consumption in the base period, September to November 1950. (This percentage varies from industry to industry.) The actual decision on the allocation of this total amongst particular firms in the industry is delegated to the selling agency of the coal industry itself (the Deutsche Kohlenverkauf), which normally allots each firm in a particular industry the same quota, but is allowed a small tolerance to cover increases in allocations to firms which have since extended their plants or scale of operations. In the United Kingdom, the Ministry of Fuel and Power's coal supply organization makes direct allocations each quarter to all consumers of more than 100 statute tons a year, and fixes annual ceilings for the permissible purchases of all other consumers.

<sup>3</sup> An inefficient firm will naturally have higher fuel costs than an efficient firm, but—as was pointed out above—this will not necessarily mean a big proportionate difference between the total costs of the two firms. It is, however, likely that a firm with abnormally high fuel costs will be inefficient in other respects too. To the extent that this correlation exists, the dissipation of the atmosphere in which all increases in costs can be passed on to the consumer—whether brought about by disinflation or by a more aggressive price control—would, by reducing the staying-power of generally inefficient firms, make some small contribution to fuel economy.

<sup>4</sup> They were also designed to ensure that each consumer got the type of coal which was most suitable for his combustion apparatus.

<sup>5</sup> Such discrimination seems to be already practised in Poland.

<sup>6</sup> In a good many cases the quantity of a particular product or a particular input of material could be used without much inaccuracy as an indicator of net output.

#### 4. THE NEED FOR COMPREHENSIVE FUEL POLICIES

The basic defect of the coal allocation schemes now in operation lies in their unambitious nature. They have been restricted to solid fuels, and there has been no attempt since the war to check the consumption of other fuels<sup>1</sup> or to take this consumption into account when fixing allotments of solid fuels.

In the circumstances, it was to be expected that there would be a considerable substitution of other sources of energy for coal by those consumers, mainly household consumers, whose purchases of coal were severely cut. As two of these alternative sources of energy, gas and electricity, are themselves wholly or partly derived from coal, the opportunity to make this substitution implied a leak in the system of coal rationing itself. The policy, everywhere pursued, of satisfying in full the public utilities' demand for coal made it certain that the leak would not be small.

This substitution of coal-derived electricity for coal itself has gone farthest in the United Kingdom. The normal household ration of hard coal in 1950 was only about three-quarters of the average consumption before the war. But household consumption of gas was nearly twice and household consumption of electricity nearly three times as high as in 1938. As a result, the amount of coal used directly and indirectly by households was actually somewhat higher in 1950<sup>2</sup> than in 1938, and the net result of the strict rationing of solid fuel was thus to produce a cut of only 7 per cent in *per capita* consumption.

There must, however, have been a rather wide dispersion about this average decline, as many houses in the United Kingdom are wired for electricity in such a way that they can support only a relatively low maximum load, sufficient for electric lighting and small

<sup>1</sup> In 1941, a scheme for the rationing of all fuels supplied to household consumers in Great Britain was drawn up by Sir William Beveridge, but — though at first accepted by the Government — was never put into effect. During the war, there was rationing of gas and electricity in Denmark, Finland, France, the Netherlands, Switzerland and possibly elsewhere.

<sup>2</sup> It is the more surprising that this trend towards the use of electricity for space-heating in the home should have been allowed to continue for so long, as in 1946 the Government had already accepted the recommendations of an expert committee (the Simon Committee) that space-heating in houses be done mainly by using solid fuel and that the use of electricity and gas for continuous, as opposed to intermittent, heating should be discouraged.

#### *Direct and Indirect Consumption of Hard Coal by Households in the United Kingdom<sup>a</sup>*

	1938	1950
Amount consumed in the form of :		
Coal	(Millions of tons)	
Normal households . . .	40.8	32.9
Miners' households . . .	4.7	5.1
	45.5	38.0
Briquettes . . . . .	0.2	0.6
Coke . . . . .	3.6	5.6
Gas . . . . .	4.7	7.3
Electricity . . . . .	4.3	12.2
Total . . . . .	58.3	58.7
	(Kilogrammes)	
Total <i>per capita</i> . . . . .	1,220	1,150

<sup>a</sup> In the conversion of coke, gas and electricity into their coal equivalent, the procedure followed was that adopted in *Domestic Fuel Policy*, a report by the Fuel and Power Advisory Council (the Simon Report), Cmd. 6762, H.M.S.O., London, 1946.

appliances, but not for the use of electric heaters.<sup>3</sup> The rationing scheme followed has thus not only failed to reduce appreciably average household consumption, but has worked inequitably as between different households.

This switch to electricity was made possible by the free availability, except at peak hours, of electric current. It was, however, greatly encouraged by the pricing policy followed by electricity undertakings. In the United Kingdom, the average price of electricity supplied to household consumers fell over the last decade not only in relation to the prices of other goods and services, but even absolutely: this is the more striking as the prices charged to industrial consumers, whose tariffs are in general subject to automatic adjustment to changes in coal prices, rose by 40 per cent.<sup>4</sup>

<sup>3</sup> A sample survey conducted by the Government Social Survey showed that, in the "coal year" 1948/49, 20 per cent of households in Great Britain had no supply of electricity, whereas only 1 per cent made no use of solid fuel. (See L. T. Wilkins, *Domestic Utilization of Heating Appliances and Expenditures on Fuels in 1948/1949*, Central Office of Information, London, 1951.)

<sup>4</sup> The *Report and Accounts of the British Electricity Authority* for the year 1950/51 give the following figures for Great Britain:

	Domestic, commercial and small power (Pence)	Large power (Pence)
1938/39 . . .	1.596	0.667
1950/51 . . .	1.463	0.930

The United Kingdom has deserved special notice in this connection for two reasons : because electrification of the home has gone further there than in other European countries dependent on thermal electricity, and because any misallocation of fuel resources in the country which is both the biggest producer and the biggest consumer of coal is bound to have repercussions elsewhere in Europe.

That there may have been such a misallocation, not only in the United Kingdom but elsewhere, is not always recognized. It is well known that the increase in household demand for electricity at a time when industrial demands for electric power were themselves increasing faster than generating capacity created difficulties for industry by causing indiscriminate "load-shedding"<sup>1</sup> at peak hours. But this increase has often been discussed as if it were a problem of the electricity supply industry alone, the only ultimate remedy to which would be a substantial increase in the capacity of public generating stations of a type similar to, though more efficient than, those at present in operation.

The problem is in fact more complicated in three ways. First, it is not always certain that resources for investment will be more efficiently used in providing generating stations than in providing industry and households with improved combustion apparatus for their own use with solid fuel. Second, it is possible that a larger percentage of the thermal electricity consumed should be generated by industrial firms themselves rather than by electricity supply undertakings. Third, it is not necessary that all future generating stations should consume coal of the kind that has been customarily used in the past. These three points will be discussed in turn.

#### *Coal and Thermal Electricity produced for Sale as Substitutes<sup>2</sup>*

A generation of sales promotion by electricity supply undertakings has encouraged the spread of

the naive belief that electrification always spells progress. This is an over-simplified view. Electricity undoubtedly provides many services which coal by itself can never provide. Quite apart from its indispensability for telecommunications, electricity has, for instance, the property of being able to provide accurately controlled heat or motive power at a moment's notice. In the field of space-heating, however, the advantages of thermal electricity over coal or gas are far more doubtful. A ton of coal used to generate electricity which is itself used for heating purposes can, in the present state of technical knowledge, give far less heat than a ton of coal burnt, either raw or after carbonization, in an efficient furnace or stove, and hardly more than a ton of raw coal burnt in an open fireplace.<sup>3</sup>

No consumer of fuel or energy is, of course, interested in its calorific value alone (household consumers least of all), and it is quite natural that some should prefer to buy thermal electricity, even when solid fuel is available, in spite of the greater expense of the more highly fabricated product, because of its other advantages. What is important if resources are to be rationally allocated is that the extra amount paid for these extra advantages should cover their social cost. It is clear that in western European countries at present this is by no means always or even usually the case. The commonest form of electricity tariff is the so-called "two-part tariff" in one of its many varieties.<sup>4</sup> This was introduced by electricity supply undertakings mainly as a sales-promotion device to ensure that power plant installed with an eye to the future should be loaded as continuously and as fully, and so exploited as profitably, as possible. As long as coal was freely available and

same order of magnitude) resulting from the fact that the gas produced, and sometimes the coke, can be used with a higher average efficiency than raw coal. Since mainly technical considerations apply, which vary from use to use, the question of what proportion of raw coal should be carbonized in different economies has, however, not been discussed here.

<sup>3</sup> In the present state of technical knowledge, the maximum thermal efficiency which a power station can reach is 30 per cent, and the average is in fact about 20 per cent. There is a further loss of energy in transmission and transformation of at least 5 per cent. The over-all fuel efficiency of heating by thermal electricity can thus not be higher than 25 per cent and may well be as low as 17 per cent. Direct heating by coal, raw or after carbonization, may in favourable circumstances reach an efficiency of 70 per cent or even more. Coal burnt in an open fireplace may have an efficiency of 25 per cent.

<sup>4</sup> Under this system, a fixed sum, depending on such factors as the number of rooms in the consumer's house, its superficial area or the rent at which it is assessed for tax, is paid irrespective of consumption, *plus* a rather low charge for each kilowatt-hour consumed.

<sup>1</sup> "Load-shedding" is a euphemism for failing to deliver the supplies contracted for to all consumers.

<sup>2</sup> Gas and coke, as well as thermal electricity, are coal-derivatives which compete in certain cases with raw coal and with electricity. The total losses of energy involved in producing them are, however, much less than those incurred in producing electricity from coal : if an up-to-date coke-oven is used, they may be as little as 15 per cent, though the average is probably 25 to 30 per cent; if the gas-works process is used, the losses are about the same. Where either gas or thermal electricity would give equally good results (e.g., in the field of intermittent space-heating) it is clearly preferable from the point of view of fuel efficiency to use gas. Moreover, against the loss of energy in carbonization of coal must be set the gain (often of about the



generating plant operating below capacity, it was reasonable that the variable component of the tariff should cover only the short-period marginal cost of supplying current.<sup>1</sup> But now that neither of these conditions is fulfilled, the variable component no longer covers the true marginal social cost of the marginal user's consumption, and the two-part tariff in its present form operates anti-socially by encouraging the use of thermal electricity for purposes for which it is not well suited.<sup>2</sup> It is not necessary here to discuss whether the two-part tariff should be abolished altogether or whether reform should be limited to an increase in the ratio of the variable to the fixed component.<sup>3</sup> All that emerges from this analysis is that in countries where space-heating accounts for the bulk of household consumption,<sup>4</sup> it would be in the interests of fuel economy to raise the marginal price charged to household consumers relatively to that charged to industry.

<sup>1</sup> Even in these conditions the system generally had the social disadvantage that small consumers (in the main those in the lower income brackets) paid more for their electricity than large consumers.

<sup>2</sup> This would be so as long as coal was not freely available, even if the problem of the peak-load were solved. A solution of the peak-load problem would, however, directly reduce the demand for coal, even in countries primarily dependent on water-power for their electricity, in that it would permit obsolescent "stand-by" plant with a low fuel efficiency to be taken out of commission. Several solutions of the peak-load problem have been suggested. One of a number of appliances which automatically limit the maximum load individual consumers can take up during peak periods could be installed. These appear to cost appreciably less than the investment needed to supply the load shed at peak periods. Alternatively, higher charges could be made for consumption at peak-hours. It is likely that this last expedient would not bring immediate reduction in consumption in countries where consumers are already well supplied with electrical appliances; in the inter-war period in Great Britain there seems to have been a two-year lag between changes in price and adjustments of consumption. (See H. S. Houthakker: "Some Calculations on Electricity Consumption in Great Britain", *Journal of the Royal Statistical Society, Series A (General)*, Vol. CXIV, Part III, 1951.)

<sup>3</sup> One direct way of achieving a similar but more discriminating effect would be to impose a prohibitive tax on electric heaters or their components. This, of course, would not have any effect on consumption until existing stocks were out. In the United Kingdom, in particular, where about 4¼ million electric heaters (but only half a million stoves for solid fuel and perhaps 600,000 gas fires) were produced in the years 1946 to 1950, even the recent prohibition of the manufacture of electric heaters may take some time to exert much influence. The electric heaters added to household stocks since the war in the United Kingdom may well have a total capacity of 6,000 megawatts: the total generating capacity of the British Electricity Authority in use at peak periods is no more than about 12,000 megawatts.

<sup>4</sup> The figures given by P. Schiller, "Operational Research in Electricity Distribution and Utilization", *Proceedings of the Institution of Electrical Engineers*, Part I, London, July 1951, suggest that over two-thirds of the electricity used by households in the United Kingdom is for space-heating, water-heating and cooking.

### *Thermal Electric Energy and Low-temperature Heat as Joint Products*

Even in cases where electricity is undoubtedly the most efficient source of energy, it is not always obvious that it can best be provided to consumers by public utilities. This is not a question which can be decided by a consideration of the relative merits of monopoly and competition. In the process of generating electricity from coal or oil, a large amount of heat is produced as a by-product. In large power-plants this by-product often has a negative value in that cooling-towers have to be erected at great cost in order to dispose of it. Alternatively, it is used to raise the temperature of rivers, with no great advantage to anglers. Schemes of "district heating", which utilize the surplus heat, are in operation in some cities, but the cost of the necessary piping is heavy, and in any case many power stations are not near great centres of population. It would, however, sometimes be quite simple for large factories so to arrange their installations that the surplus heat resulting from their own generation of electricity could be used by them for process or space heating.

As long as there were no nation-wide electricity networks, there was a strong social argument against such a dispersion of generating capacity: because peak-loads do not necessarily coincide, a central power-station supplying all factories would be able to operate with a smaller total capacity than would be needed if each factory had to cover its own peak-load.

The setting up of nation-wide "grids" into which power surplus to local requirements can be fed by decentralized generating units has removed this objection, and it is possible that the mammoth cooling-towers characteristic of the mid-twentieth century landscape will seem to later generations technical masterpieces no more useful than the Egyptian pyramids.<sup>5</sup>

<sup>5</sup> There are, of course, some economies of scale in the generation of electricity, and the steam generators of a modern power plant are far more efficient producers of energy than those of any small industrial plant, whether the latter transfers the energy from the prime mover by way of shaft and belting or by means of electricity. But the size beyond which economies of scale are small is much less than that of a modern urban generating station. Moreover, even a quite small manufacturer who needs an appreciable amount of low-pressure steam for process or space-heating can, by using a "back-pressure" plant, generate electricity for his own use with very little additional fuel.



### *Coal-mining and Thermal Electricity Supply as Complementary Industries*

Coal and thermal electricity have so far been treated as competing commodities. But their complementary character is equally important. The thermal electricity industry is one of the biggest consumers of coal; the coal industry is in all coal-producing countries one of the biggest consumers of electricity. In several countries, coal-mining concerns themselves generate considerable quantities of electricity, not all of which they consume themselves.

The social argument for this trespassing on the electricity industry's preserves is not the one just discussed in the case of manufacturing industry, but arises from the nature of the coal industry's output. Coal is not a single commodity, but a generic name for a whole range of commodities differing widely in calorific value, ash content, coking qualities and other properties, which are produced under conditions of joint supply.<sup>1</sup> Before the war, some at least of these varieties were unsaleable, and, like the surplus steam heat of public generating stations, even had a negative value, in the sense that they could be disposed of only at some cost.<sup>2</sup> Only at periods of abnormal shortage was there any demand for this low-grade fuel, and even then there was little incentive for coal-mining concerns to sell it unless they expected the shortage to be over quickly; otherwise there would be a danger that, by stimulating their customers to adapt their burning appliances to the low-grade fuel, they would spoil the market for their higher-grade coals.<sup>3</sup> With the increasing mechanization of coal-mining, the proportion of these low-grade fuels has increased and, with the shortage of better grades of coal, interest in these and other inferior substitutes

such as lignite<sup>4</sup> and peat has grown too. It is clear that from the point of view of fuel economy it is important to find ways of using the irreducible minimum of low-grade fuel without which good coal cannot be extracted rather than to let it go to waste. The bulkiness of all low-grade fuel, which means that it can be efficiently burnt only in large furnaces and that it cannot be economically transported far,<sup>5</sup> makes it likely that this will be in generating electricity at or near the pit-head. This is already being done in France, western Germany and Poland, and on a small scale in the United Kingdom.

But beyond the irreducible minimum (which varies, of course, from seam to seam) the proportion of low-grade fuel to total coal extracted can to some extent be varied at the will of coal-mining enterprises. It is quite likely that, if the practice of siting power-stations near pit-heads or of feeding the surplus power of colliery generators into national grids were more widespread, a raising of the proportion of low-grade fuel to good coal mined would actually increase the amount of usable heat or energy which can be obtained from a given investment of labour and capital in coal-mining.<sup>6</sup>

### *Conclusion*

There is one general thread running through all the previous analysis—the belief that no important progress can be made in improving the efficiency with which fuel is used unless it is recognized that the energy problem is one and indivisible. Good coal and low-grade fuel are produced jointly; either can be used to generate electricity; whichever is used, heat is

<sup>1</sup> In Great Britain 8,000 varieties of coal are sold. (See the *Report and Accounts of the National Coal Board for 1950*, pages 28 and 32). The Coal Classification Sub-Committee of the Economic Commission for Europe is engaged on preparing common descriptions of coals produced in different countries.

<sup>2</sup> With the increase in the proportion of coal which is "cleaned" and processed into a product of more or less uniform quality this type of residue has increased. It may well be argued that there is a danger that the gain in convenience from using the cleaned coal may, if the process is carried too far, be outweighed by the loss of these fines, unless a use is found for them.

<sup>3</sup> This is an unusual case of joint supply in that the jointly supplied products are, unlike mutton and wool, to some extent substitutable for one another.

<sup>4</sup> Twenty-four per cent of electricity in western Germany is generated from lignite. (See H. Freytag, *Glückauf* 87 (1951), page 374.)

<sup>5</sup> Nevertheless, as was mentioned in Chapter 1 of the *SURVEY* for 1951, slurry for which the United Kingdom could find no use was in 1951 transported to Denmark and other European countries.

<sup>6</sup> It would, from the point of view of fuel economy, be advantageous to increase the proportion of low-grade fuel up to the point where the amount of good coal forgone was equal to the amount of good coal saved by generating stations through their use of the low-grade product. The extra investment now involved in adapting generating stations to the use of low-grade fuels must also, of course, be taken account of, but need not be given excessive weight at a time when lack of coal is the ultimate bottleneck.

produced as a by-product of electricity; an industrialist who generates his own electricity and sells his surplus may be simultaneously reducing the demand for good coal by using the by-product heat, and increasing the demand by not buying electricity generated from inferior fuels. The interrelationships are thus intimate and intricate. But the general problem for Governments can be simply stated: it is to ensure that all the primary sources of energy which they control shall be used for those purposes for which they are best suited. Governments of coal-producing countries, if they are to help the economic progress of their neighbours, with which their own is bound up, will have to accustom themselves to thinking of the export of coal as a purpose which may well deserve priority over the wasteful provision of electrical energy for space-heating.

In most countries coal, gas and electricity are produced by public enterprises. The means of control are therefore readier to hand now than formerly. But any attempt to operate policies on the lines here suggested is bound to involve considerable modifications in the relation of Governments to their creatures, the public enterprises, and of these enterprises to one another. The attitude manifested in the British *Plan for Coal*, where the future demand of the public electricity industry for coal is treated as if it were a factor quite outside public control and independent of price policy, is obviously a hangover from the past. So is the hostility shown by some public electricity undertakings to proposals for allowing or encouraging industry to generate its own electricity

with the right to sell any surplus to the public utility.<sup>1</sup> Similarly, Governments will have to be willing to ride rough-shod over the enthusiasts for electrification for its own sake<sup>2</sup> who think costly investment in extra thermal generating plant a proper cure for peak-load troubles but regard investment in time-of-day meters, which would permit discrimination against peak-hour consumers, as defeatist. More generally, it will be necessary not only to be willing to adapt electricity tariffs designed for times of coal plenty to times of coal shortage, but also to consider whether a simple instruction to nationalized industries to cover their total costs, no more and no less, whatever those costs are and however often those costs change, is designed to produce either efficient operation of the industries themselves or a socially desirable pattern of fuel consumption.

<sup>1</sup> It is obvious that the adoption of such proposals would somewhat limit the monopolistic power of electricity undertakings. In the short term, they would not be able to distribute the burden of their "load-sheddings" at will, because some consumers would be immune. In the longer term, they would meet some direct price competition. If they were compelled to use low-grade fuels, which would raise their investment costs, while others were allowed to go on getting supplies of better coal or of oil, they would be competing on unfavourable terms, unless the low-grade fuel were sufficiently cheap to offset these additional costs. But, even if this were so, it might well be desirable to make the right of others to generate electricity from good coal conditional on a genuine need to use the surplus heat generated as a by-product.

<sup>2</sup> This, of course, should not be understood to mean that more generating capacity is not needed: if European industrial production is to expand sufficiently to satisfy popular aspirations, there will have to be a continued increase in the ratio of power used to labour employed. All that is here suggested is that the investment needed to bring this about would be reduced if steps were taken to ensure that the electricity produced by existing capacity is not wasted in inessential uses.

**Appendix A**  
**SUPPLEMENTARY STATISTICS**  

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**Table I**  
**INDEX NUMBERS OF INDUSTRIAL PRODUCTION**

Country	Weight in 1948	1938 = 100			1948 = 100						
		1948	1949	1950	1950				1951		
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter <sup>a</sup>
Austria . . . .	14	92 <sup>a</sup> <sup>b</sup>	123 <sup>a</sup> <sup>b</sup>	145 <sup>a</sup> <sup>b</sup>	147 <sup>a</sup>	155	158 <sup>a</sup>	171	164 <sup>a</sup>	182 <sup>a</sup>	181
Belgium . . . .	36	121	122	125	98	100	98	113	116	120	113
Bulgaria . . . .	4	182 <sup>a</sup>	235 <sup>a</sup>	290 <sup>a</sup>	150	151	169	173	188	173	195
Czechoslovakia .	36	108 <sup>a</sup> <sup>b</sup>	126 <sup>a</sup> <sup>b</sup>	146 <sup>a</sup> <sup>b</sup>	131	136	124	146	148	152	138
Denmark . . . .	17	135	142	155	113	122	110	125	124	123	108
Finland . . . .	7	133	142	145	113	115	97	110	124 <sup>a</sup>	135	124
France . . . .	127	108	118	121	109	112	102	121	124	129	115
Saar . . . .	3	67	83	88	130	120	132	147	159	159	160
Germany :											
western zones	102	50	75	95	164	178	194	221	221	232	222
West Berlin .	7	28	19	28	83	89	105	137	135	142	142
Soviet Zone .	48	60	72	91	..	..	..	..	..	..	..
Greece . . . .	5	75	89	112	127	140	158	172	161	171	172
Hungary . . . .	11	107	153	206 <sup>a</sup>	174	178	198	223	231	240	248
Ireland . . . .	6	134	151	168	120	129	125	132	124	137	128
Italy . . . .	64	96 <sup>a</sup>	101 <sup>a</sup>	115 <sup>a</sup>	114	121	117	130	135	140	133
Luxembourg . .	2	145	138	146	92	97	102	111	118	122 <sup>a</sup>	122
Netherlands . .	28	113	126	139	117	121	125	135	133	130	120
Norway . . . .	11	128	140	151	122	121	103	125	128	127	111
Poland . . . .	36	143 <sup>c</sup>	174 <sup>a</sup> <sup>c</sup>	228 <sup>a</sup> <sup>c</sup>	148 <sup>a</sup>	155 <sup>a</sup>	163 <sup>a</sup>	177 <sup>a</sup>	187	188	197
Portugal . . . .	5	118	112	122	93	94	115	113	98	..	..
Rumania . . . .	8	83	117	160	..	..	..	..	..	..	..
Spain . . . .	36	127 <sup>d</sup>	130 <sup>d</sup>	144 <sup>d</sup>	110	116	113	113	111	117	104
Sweden . . . .	43	150	157	165	110	114	99	118	116	119	..
Turkey . . . .	8	156	161	159	101	105	100	105	102	..	..
United Kingdom <sup>e</sup>	319	129 <sup>a</sup>	137	151 <sup>a</sup>	116 <sup>a</sup>	117	110 <sup>a</sup>	124	123	122 <sup>a</sup>	114
Yugoslavia . .	17	273	319	338	116	124	121	135	130	126	127
Total of countries listed <sup>e</sup>	1000	98 <sup>a</sup>	111 <sup>a</sup>	126 <sup>a</sup>	123 <sup>a</sup>	128 <sup>a</sup>	125 <sup>a</sup>	141 <sup>a</sup>	142 <sup>a</sup>	146 <sup>a</sup>	138

NOTE. — The indices in general cover manufacturing, mining and gas, water and electricity supply, but not building. In some instances, however, the index numbers do not cover the food, woodworking, clothing and printing industries. The quarterly indices may cover less than the annual indices.

<sup>a</sup> Provisional.

<sup>b</sup> 1937 = 100.

<sup>c</sup> Current production compared with 1938 production in pre-war area.

<sup>d</sup> 1940 = 100.

<sup>e</sup> The official index numbers for the United Kingdom and certain other countries are not adjusted for the changing position of Easter. In order to obtain greater comparability, the index numbers shown here for the United Kingdom—and employed in the computation of the European total—have been calculated to represent for the first quarter, the average of the official figures for the four months January–April and for the second quarter, the average of the months March–June.



**Table II**  
INDEX NUMBERS OF EMPLOYMENT IN INDUSTRY

Country	Wage and salary earners in 1948 (Millions)	1938 = 100			1948 = 100						
		1948	1949	1950	1950				1951		
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter <sup>a</sup>
Austria . . . . .	0.7	139 <sup>b</sup>	154 <sup>b</sup>	163 <sup>b</sup>	114 <sup>*</sup>	116	117 <sup>*</sup>	118 <sup>*</sup>	117 <sup>*</sup>	121 <sup>*</sup>	124
Belgium . . . . .	1.2	120 <sup>b</sup>	115 <sup>b</sup>	115 <sup>*</sup> <sup>b</sup>	95	95	96	98	101	103	103
Czechoslovakia . . . . .	1.7	104 <sup>b</sup>	108 <sup>b</sup>	117 <sup>b</sup>	108 <sup>*</sup>	108 <sup>*</sup>	115 <sup>*</sup>	..	117	117 <sup>*</sup>	123
Denmark <sup>c</sup> . . . . .	0.4	141	145	156	107	113	108	116	115	117 <sup>*</sup>	111
Finland . . . . .	0.3	129	129	126	103	105	83	105	106	109 <sup>*</sup>	110
France . . . . .	4.9	109	111	112	102	102	102	103	104	104 <sup>*</sup>	105
Germany : western zones	5.6	100	108	114	109	111	118	119	121	123	125
West Berlin	0.3	43 <sup>*</sup>	40 <sup>*</sup>	42 <sup>*</sup>	93	94	101	107	110	114	118
Soviet Zone	2.5	99	98	107	..	..	..	..	..	..	..
Hungary . . . . .	0.4	111	123	140	..	..	..	..	..	..	..
Ireland . . . . .	0.2	123	130	133	107	107	108	110	110	109	110
Italy . . . . .	2.8	105	104	102	96	97	99	98	97	..	..
Netherlands . . . . .	1.0	145	152	159	107	108	110	112	113	113	112
Norway . . . . .	0.4	143	149	153	106	106	107	108	108	110	110
Poland . . . . .	1.7	145 <sup>d</sup>	162 <sup>d</sup>	187 <sup>d</sup>	122	126	130	132 <sup>*</sup>	136 <sup>*</sup>	142 <sup>*</sup>	135
Sweden . . . . .	0.9	132	133	134	102	102	100	102	102	103 <sup>*</sup>	102
Switzerland . . . . .	0.8	151	142	138	91	90	91	94	96	99	102
United Kingdom . . . . .	8.6	113	115	117	103	104	104	105	106	106	107
Total of countries listed	34.5	108 <sup>*</sup>	112	116	104	106 <sup>*</sup>	107	109	110	111	112

NOTE. — In general, the indices cover wage and salary earners in manufacturing (excluding building), mining and gas, water and electricity supply. In some instances, indices based on numbers of wage earners only have been linked with indices of wage and salary earners.

<sup>a</sup> Provisional.

<sup>b</sup> 1937 = 100.

<sup>c</sup> Quarterly index numbers for 1950 are based on man-hours worked.

<sup>d</sup> Current employment compared with 1938 employment in pre-war area.

**Table III**  
INDEX NUMBERS OF ENGINEERING PRODUCTION

Country	Weight in 1948	1938 = 100			1948 = 100						
		1948	1949	1950	1950				1951		
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter <sup>a</sup>
Austria . . . . .	10	98 <sup>b</sup>	152 <sup>b</sup>	188 <sup>b</sup>	181	185	177	222	207	223	220
Belgium . . . . .	32	126	122	115	88	89	86	102	103	109	108
Czechoslovakia . . . . .	29	120 <sup>b</sup>	131 <sup>b</sup>	156 <sup>b</sup>	122	126	128	132	150	..	..
Denmark . . . . .	19	156	161	179	113	117	106	125	122	123	107
Finland . . . . .	6	211	230	186	111	106	55	79	116	120 <sup>*</sup>	105
France . . . . .	172	120	141	131	109	112	100 <sup>*</sup>	116	122	128	116
Germany :											
western zones	122	47	79	109	184	215	238	286	291	309	295
West Berlin	10	21	18	24	96	100	118	159	163	180	177
Greece . . . . .	1	27	31	41	115	142	160	189	160	175	189
Hungary . . . . .	2	147 <sup>*</sup>	212 <sup>*</sup>	301	..	..	..	..	..	..	..
Ireland . . . . .	2	190	218	251	132	141	121	134	121	155	147
Italy . . . . .	46	92 <sup>*</sup>	101 <sup>*</sup>	108 <sup>*</sup>	119 <sup>*</sup>	122	111 <sup>*</sup>	122	128	129	119
Netherlands <sup>c</sup> . . . . .	30	122	143	159	118	125	138	141	145	147 <sup>*</sup>	129
Norway . . . . .	10	148	160	162	116	114	90	118	116	120	96
Poland . . . . .	39	193 <sup>b</sup>	240 <sup>b</sup>	..	..	..	..	..	..	..	..
Sweden . . . . .	61	164	168	171	110	108	90	111	113	113	93
Switzerland . . . . .	25	139	117	121	..	..	..	..	..	..	..
United Kingdom <sup>d</sup> . . . . .	384	151	164	182	117	121	114	129	125	125 <sup>*</sup>	120
Total of countries listed <sup>d</sup>	1000	105 <sup>*</sup>	124 <sup>*</sup>	139 <sup>*</sup>	123	130	126 <sup>*</sup>	146	147	152 <sup>*</sup>	142

NOTE. — The indices include, as far as possible, mechanical and electrical engineering, transport equipment (including ships and aircraft) and metal goods, but exclude precision engineering and the clock and watch industries.

<sup>a</sup> Provisional.

<sup>b</sup> 1937 = 100 ; for Poland, current production compared with 1937 production in pre-war area.

<sup>c</sup> Including the manufacture of metals.

<sup>d</sup> The official index numbers for the United Kingdom and certain other countries are not adjusted for the changing position of Easter. In order to obtain greater comparability, the index numbers shown here for the United Kingdom—and employed in the computation of the European total—have been calculated to represent, for the first quarter, the average of the official figures for the four months January-April and, for the second quarter, the average of the months March-June.

**Table IV**  
INDEX NUMBERS OF CHEMICAL PRODUCTION

Country	1938 = 100			1948 = 100						
	1948	1949	1950	1950				1951		
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter <i>a</i>
Austria . . . . .	145 <i>b</i>	167 <i>b</i>	206 <i>b</i>	134	136	144	157	160	159	146
Belgium . . . . .	148* <i>c</i>	158 <i>c</i>	152* <i>c</i>	108	104	89	109	118	123	121
Czechoslovakia . . . . .	124 <i>b</i>	134 <i>b</i>	140 <i>b</i>	111		108	..	..	..	..
Denmark . . . . .	114	126	139	123	130	107	128	136	132	121
Finland . . . . .	178	204	234	131	140	123	133	143	157*	141
France . . . . .	114	112	118	102	106	101*	117	121*	127*	112
Germany : western zones .	50	69	89	154	172	193	188	207*	217*	207
Soviet Zone .	68	101	134*	..	..	..	..	..	..	..
Greece . . . . .	63	81	94	138	121	153	185	175	161	174
Hungary . . . . .	107	174	..	..	..	..	..	..	..	..
Ireland . . . . .	103	124	142	137	132	135	152	148	150	119
Italy . . . . .	93	105	121	106*	123*	119*	138*	154*	169*	170
Netherlands . . . . .	105	112*	208*	144	193	230	224	229	220	229
Norway . . . . .	119	137	174	154	172	149	168	166	166*	158
Poland . . . . .	305 <i>b</i>	400* <i>b</i>	465* <i>b</i>	137	149	143	153	170	..	..
Sweden . . . . .	190	205	220	..	..	..	..	..	..	..
Switzerland <i>d</i> . . . . .	174	158	169	..	..	..	..	..	..	..
United Kingdom <i>e</i> . . . . .	184	189	218	112	115	118	129	131*	133*	125

NOTE. — As figures relating to indices of chemical production are published for very few European countries, or released with considerable delay, or related to a comparatively limited sector of the industry, it has become increasingly difficult to compile comparable data and it has now been decided to cease computing a European total. For a description of individual indices, see "Notes to the Statistics".

<sup>a</sup> Provisional.

<sup>b</sup> 1937 = 100; for Poland, 1937 production in pre-war area = 100.

<sup>c</sup> 1936-1938 = 100.

<sup>d</sup> Approximate index, based on exports and man-hours worked.

<sup>e</sup> Adjusted for the changing position of Easter.

**Table V**  
INDEX NUMBERS OF TEXTILE PRODUCTION

Country	Weight in 1948	1938 = 100			1948 = 100							
		1948	1949	1950	1950				1951			
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	
Austria . . . .	7	51 <i>b</i>	77 <i>b</i>	94 <i>b</i>	194	180	170	202	212	211	210	
Belgium . . . .	47	116	120	146	118	110	120	143	139	138	107	
Czechoslovakia <i>c</i>	36	77 <i>b</i>	81 <i>b</i>	88* <i>b</i>	122	121	95	123*	..	..	..	
Denmark . . . .	6	134	151	172	130	137	115	131	136	121*	91	
Finland . . . .	7	110	131	146	130	132	117	141	145	158	129	
France . . . .	184	102	101	109	107	111	92*	116	115	121	99	
Germany : western zones	91	44	75	98	211	207	216	260	264	258*	236	
Greece . . . .	13	89	100	137	125	142	168	178	164	176	183	
Hungary . . . .	11	88	111	129	..	..	..	..	..	..	..	
Ireland . . . .	6	148	160	185	120	129	118	133	127	146	118	
Italy . . . .	126	96	99	102	107	103	97	123	127*	120	100	
Netherlands . .	31	105	122	136	131	129	122	138	143	136	115	
Norway . . . .	7	144	168	180	135	130	102	133	147	151	115	
Poland . . . .	46	114 <i>b</i>	133 <i>b</i>	153* <i>b</i>	130*	126	137*	142*	139*	143	..	
Spain . . . .	42	153 <i>d</i>	145 <i>d</i>	163 <i>d</i>	99	111	102	104	98	..	..	
Sweden . . . .	34	135	142	139 <i>c</i>	106 <i>c</i>	102 <i>c</i>	89 <i>c</i>	105 <i>c</i>	109 <i>c</i>	109	92	
United Kingdom <i>e</i> .	306	95	102	112	118	118	111	123	122	123	113	
Total of coun- tries listed <i>e</i> .	1000	87 <i>f</i>	98 <i>f</i>	110 <i>f</i>	124	124	117*	137	137*	137	122*	

<sup>a</sup> Provisional.

<sup>b</sup> 1937 = 100; for Poland, 1937 production in pre-war area = 100.

<sup>c</sup> Including ready-made clothing.

<sup>d</sup> 1940 = 100.

<sup>e</sup> The official index numbers for the United Kingdom and certain other countries are not adjusted for the changing position of Easter. In order to

obtain greater comparability, the index numbers shown here for the United Kingdom—and employed in the computation of the European total—have been calculated to represent for the first quarter the average of the official figures for the four months January-April and, for the second quarter, the average of the months March-June.

<sup>f</sup> Excluding Spain.

Table VI  
INDEX NUMBERS OF AGRICULTURAL PRODUCTION

Country	Percentage share of total in 1934-1938	1934-1938 = 100				1949/50 = 100
		1947/48	1948/49	1949/50	1950/51	1950/51
<i>Western Europe</i>						
United Kingdom . . . . .	6.0	108	122	123	130	106
Ireland . . . . .	1.3	92	96	101	106	105
Sweden . . . . .	2.0	100	109	115	113	98
Norway . . . . .	0.6	91	101	109	118	108
Finland . . . . .	1.0	87	106	113	115	102
Denmark . . . . .	2.0	90	97	118	126	107
Netherlands . . . . .	2.5	87	104	126	123	98
Belgium-Luxembourg . . . . .	1.8	85	93	115	111	97
France . . . . .	16.1	77	95	97	108	111
Switzerland . . . . .	1.3	100	112	104	120	115
Portugal . . . . .	1.5	109	95	104	102	98
Spain . . . . .	5.3	89	80	85	86	101
Italy . . . . .	10.3	89	97	105	109	104
Greece . . . . .	1.8	88	83	122	99	81
Turkey . . . . .	4.5	103	118	102	122	120
Austria . . . . .	1.9	69	74	83	98	118
Western Germany . . . . .	10.7	64	78	92	104	113
Total . . . . .	70.6	85	96	103	110	107
<i>Eastern Europe</i>						
Eastern Germany . . . . .	3.9	58	74	71	..	..
Poland . . . . .	10.5	62	65	71	..	113 <i>a</i>
Czechoslovakia . . . . .	4.1	66	76	81	..	105 <i>a</i>
Hungary . . . . .	2.9	71	90	87	..	102 <i>a</i>
Rumania . . . . .	3.1	80	91	..	..	..
Bulgaria . . . . .	1.6	70	87	..	..	..
Yugoslavia . . . . .	3.3	79	93	96	..	72 <i>a</i>
Total . . . . .	29.4	67	77	80	..	..
Total Europe (excluding U.S.S.R.)	100	80	90	96	..	..

Sources: The index numbers for individual countries have been supplied by the Food and Agriculture Organization of the United Nations, except figures for the calendar year 1950 for Poland, Czechoslovakia, Hungary and Yugoslavia, which are derived from national sources. For details, see "Notes to the Statistics".

NOTE. — The indices relate post-war production in post-war territory to pre-war production in post-war territory during the agricultural years—i.e., the period July-June. They include the staple crops harvested in the first year mentioned. The index numbers differ in many instances from those published by individual countries.

<sup>a</sup> Calendar year 1950 based on calendar year 1949.

**Table VII**

**PRODUCTION OF COAL <sup>a</sup>**

*Monthly averages or calendar months*

*Millions of tons*

Country	1938	1949	1950	1950				1951			
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	July Aug. Sept.
Belgium . . . . .	2.47	2.32	2.28	2.43	2.30	2.00	2.37	2.42	2.55*	2.31	2.11 2.41 2.41
Czechoslovakia . . . . .	1.39 <sup>b</sup>	1.42	1.54	1.51	1.43	1.46	1.75	1.59	1.52	1.58	.. ..
France . . . . .	3.88	4.27	4.24	4.54	4.11	3.95	4.35	4.51	4.41	4.17	4.11 4.17 4.22
Saar . . . . .	1.20	1.19	1.26	1.28	1.23	1.22	1.30	1.41	1.35	1.33	1.36 1.34 1.29
Germany :											
Western zones <sup>c</sup> . . . . .	11.54	8.73	9.36	9.40*	8.79	9.40	9.85	10.03	9.95	9.90	9.96 10.26 9.48
Soviet Zone . . . . .	0.50	0.25	0.23	..	..	..	..	..	..	..	.. ..
Netherlands . . . . .	1.12	0.98	1.02	1.04	1.00	1.04	1.01	1.06	1.02	1.03	1.04 1.04 1.01
Poland . . . . .	5.88 <sup>d</sup>	6.18*	6.50	6.56	6.20	6.62	6.62	6.75*	6.83*	6.73	6.91 6.80 6.50
United Kingdom <sup>e</sup> . . . . .	19.32	18.22	18.31	18.94	18.29	17.15	18.88	19.00	19.21	17.55	17.15 17.08 18.41
Other European countries . . . . .	1.06	1.69	1.73	1.76	1.73	1.68	1.76	1.75	1.87*	1.78*	1.69 1.90 1.75
<b>Total Europe (excluding U.S.S.R.) . . . . .</b>	<b>48.36</b>	<b>45.25*</b>	<b>46.47</b>	<b>47.68*</b>	<b>45.31*</b>	<b>44.77*</b>	<b>48.13*</b>	<b>48.76*</b>	<b>48.98*</b>	<b>46.67</b>	<b>46.18 46.87 46.94</b>
<b>Index numbers :</b>											
1938 = 100 . . . . .	100	94	96	99	94	93	100	101	101	97	96 97 97
1948 = 100 . . . . .	115	108	110	113	108	106	114	116	116	111	110 111 112
<b>United States <sup>f</sup> . . . . .</b>	<b>29.84</b>	<b>35.69*</b>	<b>41.58*</b>	<b>31.90*</b>	<b>44.99*</b>	<b>42.81*</b>	<b>46.63*</b>	<b>44.24*</b>	<b>40.90*</b>	<b>40.45</b>	<b>33.78 45.97 41.61</b>

<sup>a</sup> Excluding lignite.    <sup>b</sup> 1937.    <sup>c</sup> Including production of pitch coal.    <sup>d</sup> Post-war boundaries.    <sup>e</sup> Including production of opencast coal.  
<sup>f</sup> Including a small amount of lignite.

**Table VIII**

**PRODUCTION OF ELECTRIC POWER**

*Monthly averages or calendar months*

*Millions of kilowatt-hours*

Country	1938	1949	1950	1950				1951			
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	July Aug. Sept.
Austria <sup>a</sup> . . . . .	250	459	525	427*	534	594*	546*	531	646*	701	730 729 644
Belgium <sup>b</sup> . . . . .	440	680	707	719	648	649	812*	803	747	747	703 755 782
Czechoslovakia . . . . .	343 <sup>c</sup>	689	773*	..	..	..	..	..	..	..	.. ..
Denmark . . . . .	95 <sup>d</sup>	154*	167*	170*	141*	155*	201*	206	175	167	142 173 186
Finland . . . . .	259	296	347*	347*	330*	339*	373*	373	377	357	364 361 347
France <sup>e</sup> . . . . .	1,549*	2,380*	2,623	2,568	2,541	2,416	2,967	3,022	2,973	2,776	2,845 2,654 2,830
Germany : western zones . . . . .	2,591	3,226	3,668	3,514	3,279	3,647	4,232*	4,185	4,052*	4,180	4,071 4,242 4,228
Italy . . . . .	1,295	1,732	2,057*	1,809*	2,133*	2,202*	2,083*	2,225*	2,500*	2,529	2,688 2,443 2,455
Netherlands . . . . .	295	499	586	592	522	553	677	633	567	573	540 590 590
Norway <sup>f</sup> . . . . .	803	1,265	1,444	1,515	1,358	1,296	1,607	1,514	1,359	1,352	1,280 1,357 1,419
Poland <sup>g</sup> . . . . .	580*	679	784	777	705	747	907	839*	818	..	.. ..
Spain . . . . .	229	469	583	612	595	563	563	634	653	..	648 644 ..
Sweden . . . . .	680	1,346	1,529	1,553	1,433	1,425	1,705	1,663	1,578	1,544	1,405 1,575 1,651
Switzerland <sup>h</sup> . . . . .	459 <sup>h</sup>	648*	760	597	766	933	743	726	895	1,014	1,018 1,055 968
United Kingdom <sup>i</sup> . . . . .	2,031	4,093	4,585*	4,956*	4,108*	3,906*	5,368*	5,612	4,652	4,196	4,057 4,068 4,462
Other European countries . . . . .	2,168*	2,562*	2,885*	2,821*	2,641*	2,804*	3,284*	3,140*	2,916*	3,082	2,947 3,122 3,177
<b>Total Europe (excluding U.S.S.R.) . . . . .</b>	<b>14,067*</b>	<b>21,177*</b>	<b>24,023*</b>	<b>23,750*</b>	<b>22,445*</b>	<b>22,956*</b>	<b>26,948*</b>	<b>26,956*</b>	<b>25,700*</b>	<b>25,493</b>	<b>24,967 25,387 26,123</b>
<b>Index numbers :</b>											
1938 = 100 . . . . .	100	151*	171*	169*	160*	163	192*	192*	183*	181*	177* 180 186
1948 = 100 . . . . .	72	108	122*	121*	114*	117	137	137*	131	130	127 129 133
<b>United States . . . . .</b>	<b>11,830</b>	<b>28,711</b>	<b>32,327</b>	<b>30,777</b>	<b>31,095</b>	<b>32,717</b>	<b>34,719</b>	<b>35,333</b>	<b>34,844</b>	<b>36,080</b>	<b>35,435 37,510 35,296</b>

<sup>a</sup> Total production of public utilities and other plants with an installed capacity of 200 kilowatts and over.  
<sup>b</sup> Total production of public utilities and other plants with an installed capacity of more than 100 kilowatts.  
<sup>c</sup> 1937.  
<sup>d</sup> 1 April 1938-31 March 1939.  
<sup>e</sup> Production of hydro-electric plants with a generating capacity of over 1,000 kilowatts and of thermo-electric plants with a capacity of over 5,000 kilowatts.

<sup>f</sup> Production of public utilities and other plants with an installed capacity of 1,000 kilowatts and over. The pre-war Polish figure relates to post-war boundaries.  
<sup>g</sup> Production of public utilities, plus purchases for the public grid from railway plants and industrial establishments.  
<sup>h</sup> 1 October 1937-30 September 1938.  
<sup>i</sup> Public utility production ; excluding Northern Ireland.



**Table IX**  
**PRODUCTION OF CRUDE STEEL**

*Monthly averages or calendar months*

*Thousands of tons*

Country	1938	1949	1950	1950				1951					
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	July	Aug.	Sept.
Belgium . . . . .	191*	322*	316*	299*	296*	284*	383	408*	430*	414	396	436	411
Luxembourg . . . . .	120	189	204	179	188*	215	236	248	255	261	261	266	257
France . . . . .	518	763*	721	665	721	681	817	799	826	781	798	763	782
Saar . . . . .	213	146	158	147	130	166	190	207	214	219	213	226	217
Germany . . . . .	1,633 <sup>a</sup>	813*	1,093*	..	..	..	..	..	..	..	..	..	..
of which western zones .	1,492	763	1,010	949	950	1,072	1,069	1,004	1,143	1,160	1,158	1,186	1,136
Soviet Zone . . . . .	141	50*	83*	..	..	..	..	..	..	..	..	..	..
Italy . . . . .	194	171	197	187	190	203	207	224*	262	254	276	229	258
Poland . . . . .	158 <sup>a</sup>	192	210*	207	206	209	217*	214*	229	225	..	..	..
Sweden . . . . .	82*	116*	122*	130*	116*	107*	132*	121	128*	111	84	113	136
United Kingdom . . . . .	880	1,317*	1,380	1,412	1,402*	1,290*	1,414	1,391*	1,371*	1,209	1,126	1,169	1,333
Other European countries	378*	581*	650*	636	654	664*	648*	701*	729*	735	733	739	731
<b>Total Europe</b> <b>(excluding U.S.S.R.) .</b>	<b>4,367*</b>	<b>4,610*</b>	<b>5,051*</b>	<b>4,907*</b>	<b>4,953*</b>	<b>4,991*</b>	<b>5,401*</b>	<b>5,426*</b>	<b>5,702*</b>	<b>5,522</b>	<b>5,423</b>	<b>5,505</b>	<b>5,639</b>
<i>Index numbers :</i>													
1938 = 100 . . . . .	100	106*	116*	112	113	114	124*	124*	131*	126	124	126	129
1948 = 100 . . . . .	110*	117	128	124	125	126	137	137	144	140	137	139	143
United States . . . . .	2,400	5,895	7,310	6,716	7,528	7,406	7,589	7,765	8,041	7,883	7,874	7,923	7,852

<sup>a</sup> Post-war boundaries.

Table X  
PRODUCTION, TRADE AND HOME SUPPLIES OF STEEL <sup>a</sup>

Annual totals or annual rates					Millions of tons									
Country	Production of crude steel				Net trade in crude and finished steel				Home supplies of steel					
	1938	1949	1950	1951	1938	1949	1950	1951	1938	1949	1950	1951		
			First half	Second half			First half	Second half			First half	Second half		
Austria . . . . .	0.67	0.84	0.93	0.96	0.99	-0.09	-0.14	-0.15	-0.18	0.58	0.70	0.78	0.45	
Belgium-Luxembourg . . . . .	3.73	6.14	5.77	6.71	8.05	-2.82	-4.65	-4.11	-4.56	0.91	1.49	1.66	2.15	
Denmark . . . . .	0.01	0.08	0.12	0.13	0.15	+0.45	+0.53	+0.60	+0.51	0.46	0.61	0.72	0.64	
France . . . . .	6.22	9.15	8.32	8.99	9.75	-1.49	-2.40	-3.62	-5.21	4.73	8.51	6.36	5.92	
Saar . . . . .	2.56	1.76	1.66	2.14	2.53	..	..	..	..	.. <sup>b</sup>	..	..	..	
Western Germany . . . . .	17.90	9.16	11.40	12.84	12.88	.. <sup>b</sup>	-0.62	-1.69	-2.42	.. <sup>b</sup>	8.54	9.71	10.42	
Italy . . . . .	2.32	2.06	2.26	2.46	2.92	+0.15	+0.19	+0.75	+0.49	2.47	2.25	2.94	2.95	
Netherlands . . . . .	0.05	0.43	0.47	0.51	0.54	+1.02	+1.16	+1.35	+1.18	1.07	1.59	1.82	1.69	
Norway . . . . .	0.06	0.07	0.07	0.08	0.08	+0.27	+0.63	+0.46	+0.44	0.33	0.70	0.53	0.52	
Sweden . . . . .	0.99	1.39	1.48	1.44	1.52	+0.25	+0.79	+0.66	+0.62	1.24	2.18	2.14	2.06	
Switzerland . . . . .	0.02	0.12	0.13	0.13	0.14	+0.44	+0.47	+0.41	+0.90	0.46	0.59	0.54	1.03	
United Kingdom . . . . .	10.57	15.80	16.88	16.22	16.57	-0.62	-1.33	-2.43	-3.04	9.95	14.47	14.45	13.18	
Other western Europe <sup>c</sup> . . . . .	0.90	1.38	1.48	1.44	1.52	+0.60	+0.62	+0.77	+0.87	1.50	2.00	2.25	2.31	
Total western Europe <sup>c</sup> . . . . .	46.00	48.38	50.90	54.05	57.64	..	-4.75	-7.00	-10.40	..	43.63	43.90	46.15	
Czechoslovakia . . . . .	1.87	2.76	3.01	3.25	3.25 <sup>d</sup>	-0.42	..	..	..	1.45	..	..	..	
Eastern Germany . . . . .	1.70	0.60	0.99	1.56	1.56 <sup>d</sup>	..	..	..	..	..	..	..	..	
Poland . . . . .	1.90 <sup>e</sup>	2.30	2.48	2.55	2.66	-0.34 <sup>f</sup>	..	..	..	1.10 <sup>f</sup>	..	..	..	
Other eastern Europe . . . . .	0.93	1.31	1.58	..	..	+0.23	..	..	..	1.39	..	..	..	
Total eastern Europe . . . . .	6.40	6.97	8.08	..	..	..	..	..	..	..	..	..	..	
Total Europe (excluding U.S.S.R.) . . . . .	52	55	61	67	..	-4.64	..	..	..	48	51	52	..	
U.S.S.R. . . . .	18.0	23.3	27.3	31.3 <sup>d</sup>	..	..	..	..	..	..	..	..	..	

Sources: Quarterly Bulletin of Steel Statistics, Economic Commission for Europe, data supplied by the Steel Section, Economic Commission for Europe, and national trade statistics. See also "Notes to the Statistics".

NOTE. — The figures of trade in finished steel have been converted into crude equivalent by methods described in "Notes to the Statistics" and are thus different from those shown in Tables 21 and XXIX. See also "Notes to the Statistics" for details on eastern European production data. (+) net imports; (-) net exports.

<sup>a</sup> In crude steel equivalent.

<sup>b</sup> Home supplies of steel in the pre-war area of Germany (including the Saar) were 20.36 million tons. In 1937, the trade of western Germany with the rest of Germany and with other countries represented a net export of about 3.3 million tons.

<sup>c</sup> Including Yugoslavia.

<sup>d</sup> Estimated annual rate of the first 9 months.

<sup>e</sup> Production in the post-war area; production in the pre-war area was 1.44 million tons.

<sup>f</sup> Pre-war area.

Annual totals or annual rates

Millions of tons

**Table XI**  
**PRODUCTION OF CEMENT**

Monthly averages

Thousands of tons

Country	1938	1949	1950	1950				1951		
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
Austria . . . . .	36 <sup>a</sup>	92	107	79	115	128	107	95	133	138
Belgium . . . . .	243	244	296	233	311	320	322	318	385	392
Czechoslovakia . . . . .	106 <sup>a</sup>	145	..	..	..	..	..	..	..	..
Denmark . . . . .	53	70	73	59	78	77	77	67	81	94
France . . . . .	296	537	601	507	619	642	635	590*	686	717
Germany . . . . .	1,162 <sup>b</sup>	..	..	..	..	..	..	..	..	..
of which western zones . . . . .	955	705	906	583	942	1,123	978	781	1,088	1,133
Soviet Zone . . . . .	207	..	..	..	..	..	..	..	..	..
Italy . . . . .	384	336	417	329	436	469	434	364	485*	526
Netherlands . . . . .	38	47	49	40	49	55	53	50	59	62
Norway . . . . .	28	49	49	47	51	50	47	50	60	65
Poland . . . . .	254 <sup>b</sup>	195	209*	156	240	233	208*	178	..	238
Portugal . . . . .	22	43	48	36	47	56	52	38	46	68
Spain . . . . .	49	141	161	161	167	165	152	163	188	187
Sweden . . . . .	83	141	162	118	174	187	170	130	185	179
Turkey . . . . .	24	31	33	24	38	37	33	23	39	35
United Kingdom . . . . .	653	780	826	787	840	865	810	788	906	883
Other European countries . . . . .	290	457	528*	441	551*	579	543	528*	580*	595
<b>Total Europe (excluding U.S.S.R.) . . . . .</b>	<b>3,721</b>	<b>4,109</b>	<b>4,737*</b>	<b>3,812</b>	<b>4,953*</b>	<b>5,281</b>	<b>4,907*</b>	<b>4,413*</b>	<b>5,486*</b>	<b>5,625</b>
<b>Index numbers :</b>										
1938 = 100 . . . . .	100	110	127	102	133	142	132	119*	147	151
1948 = 100 . . . . .	107	119	137	110	143	153	142	127	158	162
<b>United States . . . . .</b>	<b>1,497</b>	<b>2,951</b>	<b>3,167*</b>	<b>2,384*</b>	<b>3,261*</b>	<b>3,561</b>	<b>3,462*</b>	<b>2,868</b>	<b>3,576</b>	<b>3,761</b>

<sup>a</sup> 1937.

<sup>b</sup> Post-war boundaries.

**Table XII**

**PRODUCTION OF MOTOR VEHICLES**

*Monthly averages*

*Thousands*

Country	1938	1949	1950	1950				1951		
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
PASSENGER CARS										
France . . . . .	15.20 <sup>a</sup>	15.64	21.44	17.52	23.41	19.85	24.98	25.69	27.06	22.61
Germany : western zones . . .	14.51 <sup>b</sup>	8.67	18.01	14.23	16.59	19.02	22.20	22.40	22.67	21.35
Italy . . . . .	4.92	5.45	8.44	7.25	8.12	8.33	10.06	10.72	10.79	10.02
United Kingdom . . . . .	28.42	34.36	43.54	43.79	43.71	41.25	45.42	41.06	40.45	36.32
Total of countries listed . . .										
63.05	64.12	91.43	82.79	91.83	88.45	102.66	99.87	100.97	90.30	
Index numbers :										
1938 = 100 . . . . .	100	102	145	131	146	140	163	158	160	143
1948 = 100 . . . . .	149	151	215	195	216	208	242	235	238	213
United States <sup>c</sup> . . . . .										
166.75	426.62	555.49	447.60	583.80	631.56	558.99	533.95	499.00	389.75	
COMMERCIAL VEHICLES										
Austria . . . . .	0.10 <sup>d</sup>	0.18	0.22	0.25	0.20	0.21	0.22	0.22	0.23	0.23
France . . . . .	3.75 <sup>a</sup>	8.16	8.36	6.56	8.61	7.91	10.36	10.39	11.40	9.79
Germany : western zones . . .	3.56 <sup>b</sup>	4.79	6.82*	4.65*	6.24*	8.03*	8.35*	8.33	8.00	6.93
Italy . . . . .	0.85	1.72	2.21	2.34	2.32	1.87	2.31	2.45	2.32	2.11
United Kingdom . . . . .	8.67	18.03	21.76	22.11	22.57	20.28	22.09	22.77	21.89	19.60
Total of countries listed . . .										
16.93	32.88	39.37*	35.91*	39.94*	38.30*	43.33*	44.16	43.84	38.66	
Index numbers :										
1938 = 100 . . . . .	100	194	233*	212*	236*	226*	256*	261	259	228
1948 = 100 . . . . .	64	124	149*	136*	151*	145*	164	167	166	146
United States <sup>c</sup> . . . . .										
40.68	94.51	111.43	94.89	120.48	117.67	109.36	126.11	137.56	114.59	

<sup>a</sup> October 1937-September 1938.

<sup>b</sup> 1936.

<sup>c</sup> Factory sales.

<sup>d</sup> 1937.



**Table XIII**  
**PRODUCTION OF MAJOR AGRICULTURAL CROPS BY COUNTRIES AND BY REGIONS**  
*Thousands of tons*

Countries and regions	BREAD GRAIN			COARSE GRAIN			POTATOES			SUGAR BEET		
	1934-1938	1950/51	1951/52	1934-1938	1950/51	1951/52	1934-1938	1950/51	1951/52	1934-1938	1950/51	Estimated 1951/52 as percentage of 1950/51
<b>Western Europe <sup>a</sup></b>												
Belgium . . . . .	874	785	691	746	764	708	3,169	2,309	2,049	1,459	2,900	81
France . . . . .	8,912	8,307	7,532	6,283	5,458	6,076	17,158	14,420	13,273	8,785	13,576	84
Saar . . . . .	53	38	38	30	24	31	399	225	214	3	2	85
Ireland . . . . .	180	336	275	706	658	750	2,583	2,920	2,457	515	588	98
Luxembourg . . . . .	46	45	45	45	45	45	203	139	139	—	—	—
Netherlands . . . . .	926	716	658	468	664	705	2,720	4,052	3,907	1,637	2,913	93
Switzerland . . . . .	202	266	230	49	144	146	738	1,130	1,050	74	235	92
United Kingdom . . . . .	1,752	2,706	2,239	2,876	5,118	4,869	5,011	9,661	7,653	3,195	5,216	89
<b>Total . . . . .</b>	<b>12,945</b>	<b>13,199</b>	<b>11,708</b>	<b>11,203</b>	<b>12,875</b>	<b>13,330</b>	<b>31,981</b>	<b>34,856</b>	<b>30,742</b>	<b>15,668</b>	<b>25,430</b>	<b>86</b>
<b>Northern Europe</b>												
Denmark . . . . .	645	629	515	2,908	3,109	3,265	1,349	1,850	1,850	1,483	2,624	91
Finland . . . . .	482	525	439	851	934	964	1,105	1,210	1,237	102	262	104
Iceland . . . . .	—	—	—	—	—	—	6	8	8	—	—	—
Norway . . . . .	67	69	48	315	289	320	892	1,116	1,138	—	—	—
Sweden . . . . .	1,105	983	660	2,029	1,667	1,724	1,847	1,734	1,820	1,888	1,978	93
<b>Total . . . . .</b>	<b>2,299</b>	<b>2,206</b>	<b>1,662</b>	<b>6,103</b>	<b>5,999</b>	<b>6,273</b>	<b>5,199</b>	<b>5,918</b>	<b>6,053</b>	<b>3,473</b>	<b>4,864</b>	<b>92</b>
<b>Central Europe</b>												
Austria . . . . .	956	772	726	909	597	727	2,845	2,548	2,463	1,130	821	100
Western Germany . . . . .	5,586	5,635	5,983	4,932	4,571	5,191	19,603	27,958	24,103	4,118	7,016	101
<b>Total . . . . .</b>	<b>6,542</b>	<b>6,407</b>	<b>6,709</b>	<b>5,841</b>	<b>5,168</b>	<b>5,918</b>	<b>22,448</b>	<b>30,506</b>	<b>26,566</b>	<b>5,248</b>	<b>7,837</b>	<b>101</b>
<b>Mediterranean Europe</b>												
Greece . . . . .	813	898	978	597	547	604	139	348	393	—	—	—
Italy . . . . .	7,395	7,756	6,867	3,751	2,767	3,383	2,626	2,374	3,268	2,879	4,471	107
Portugal . . . . .	583	719	822	432	711	747	555	971	1,150	—	—	—
Spain . . . . .	4,915	3,940	4,772	3,799	2,532	3,080	4,954	2,800	3,000	2,150	1,336	133
Turkey . . . . .	3,748	4,314	6,270	2,828	3,193	4,113	171	605	619	432	821	104
<b>Total . . . . .</b>	<b>17,454</b>	<b>17,627</b>	<b>19,709</b>	<b>11,407</b>	<b>9,750</b>	<b>11,927</b>	<b>8,445</b>	<b>7,098</b>	<b>8,430</b>	<b>5,461</b>	<b>6,628</b>	<b>115</b>
<b>Eastern Europe</b>												
Bulgaria . . . . .	1,957	1,750	—	1,500	1,260	—	112	80	100	115	300	137
Czechoslovakia . . . . .	3,081	2,630	2,720	2,504	2,260	2,500	9,635	8,830	8,830*	4,664	5,950	—
Eastern Germany . . . . .	3,630	2,950	3,660	2,850	1,920	2,490	13,630	13,060	13,480	5,412	5,400	109
Hungary . . . . .	2,920	2,820	2,880	3,190	2,530	3,520	2,130	1,400	2,780	960	1,240	153
Poland . . . . .	8,819	8,360	—	4,462	3,200	3,200*	38,014	36,880	—	5,962	6,400	—
Rumania . . . . .	2,765	2,248	—	5,156	4,750	—	1,225	820	1,090	398	840	108
Yugoslavia . . . . .	2,663	2,050	2,550	5,432	2,550	4,590	1,468	1,020	1,700	509	850	149
<b>Total . . . . .</b>	<b>25,835</b>	<b>22,808</b>	<b>24,900*</b>	<b>25,094</b>	<b>18,470</b>	<b>23,200*</b>	<b>66,214</b>	<b>62,090</b>	<b>58,880*</b>	<b>18,020</b>	<b>20,980</b>	<b>106*</b>

Sources: Food and Agriculture Organization of the United Nations, except for the data on eastern European countries. For details, see "Notes to the Statistics".

NOTE. — "Bread grain" consists of wheat and rye. "Coarse grain" includes barley and oats in all instances, maize and mixed grain in the case of major producing countries. It that used in other parts of this document.

must, however, be taken into consideration that, while rye is hardly used for bread in some countries, maize and mixed grain is partly considered bread grain in others.

a The definition of "western Europe" in this table is, of course, considerably different from that used in other parts of this document.

**Table XIV**  
**NUMBERS OF CATTLE AND PIGS**  
*Thousand head*

Country	CATTLE				PIGS			
	Month of census <sup>a</sup>	1949	1950	1951	Month of census <sup>a</sup>	1949	1950	1951
Austria . . . . .	XI/XII	2,108	2,280	2,283	IX	1,746	2,408	2,402
Belgium-Luxembourg . . . . .	V	1,996	2,220	2,276	V	1,182	1,425	1,359
Bulgaria . . . . .	XII	2,130	2,140	..	XII	1,320	1,500	..
Czechoslovakia . . . . .	VI	3,663	4,000	4,000	VI	3,242	3,600	3,400 *
Denmark . . . . .	VII	2,949	3,053	3,101	XI	3,101	3,627	3,251
Finland . . . . .	VI	1,542	1,847	..	III	409	470	..
France . . . . .	X	15,432	15,808	16,162	X	6,760	6,824	7,102
Germany : western zones . . . .	VI	11,003	11,286	11,453	IX	9,042	11,103	13,945
Soviet Zone . . . . .	IX/X	3,124	3,542	3,685	IX/X	3,841	5,460	6,832
Greece . . . . .	I	674	675	700	I	509	530	550
Hungary . . . . .	V	2,070	2,050	1,700 <sup>b</sup>	V	5,200	6,500	4,500 <sup>b</sup>
Ireland . . . . .	VI	4,122	4,322	4,381	VI	675	645	548
Italy . . . . .	I	8,162	8,331	8,325	I	4,400	4,052	4,025
Netherlands . . . . .	V	2,540	2,723	2,882	V	1,298	1,860	1,917
Norway . . . . .	VI	1,224	1,237	1,231	VI	419	422	386
Poland . . . . .	VI	6,365	7,164 <sup>c</sup>	6,700	VI	5,837	9,928 <sup>c</sup>	..
Rumania . . . . .	XII	..	4,300	..	XII	..	3,200	..
Sweden . . . . .	VI	2,584	2,648	2,633	VI	1,238	1,268	1,331 <sup>d</sup>
Switzerland . . . . .	IV	1,478	1,530	1,607	VI	887	908	892
United Kingdom . . . . .	IX	10,204	10,503	10,310	IX	3,087	3,327	4,532
Yugoslavia . . . . .	I	5,264	5,236	4,720	I	4,127	4,287	3,910

Sources : The data on western European countries were supplied by the Food and Agriculture Organization of the United Nations ; those on eastern European countries were taken directly from national statistics.

<sup>a</sup> In order to present the most current data, the latest available 1951 census has been selected and compared with the same period in 1949 and 1950.

The 1949 and 1950 figures may therefore differ from those given in Table 15 of the 1950 SURVEY.

<sup>b</sup> February census.

<sup>c</sup> December census.

<sup>d</sup> April census.

Table XV

PRODUCTION OF LIVESTOCK PRODUCTS

Commodity and producer country	Monthly average	Index numbers — 1947 = 100								
	1947	1949	1950	1950				1951		
				First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
<i>Meat<sup>a</sup></i>	(Thousands of tons)									
Austria <sup>b</sup>	10.0 <sup>b</sup>	116	214	..	..	..	..	170	168	151
Belgium	14.2	169	190	156	199	199*	206*	176	194*	175
Czechoslovakia	36.0	68*	..	126	86	..	..	..	..	..
Denmark	33.6	99	126	124	123	127	132	155	149	126
Germany : western zones <sup>c</sup>	55.1 <sup>c</sup>	100	171*	152*	174	172*	184*	180*	200	221
Ireland	11.4	91	92	97	85	94	91	94	64	..
Italy <sup>d</sup>	8.4	157	159	177	142	132	187	172	134	118
Norway	6.8	103	153	161	148	105	198	133	134	127
Portugal <sup>e</sup>	4.1	161	149	154	154	144	146	141	139	149
Sweden <sup>f</sup>	18.8	105	121*	115*	118	115*	130*	119*	128*	118
Switzerland <sup>g</sup>	4.3	119	132*	135*	128	123	142*	140	130	127
United Kingdom	66.4	120	146	104	120	171	187	101	120	178
<i>Milk<sup>h</sup></i>	(Thousands of hectolitres)									
Austria <sup>i</sup>	389	154	182	174	196	188	169	168	176	180
Czechoslovakia	1,954	108	..	103	117	..	..	..	..	..
Denmark	3,319	119	132	110	153	149	115	111	152	140
Germany : western zones <sup>j</sup>	8,294*	133	142*	110*	152*	154*	124*	124*	168*	165
Netherlands <sup>k</sup>	2,334	153	165	125	216	199	120	120	210	193
Norway <sup>k</sup>	523	135	151	139	188	160	117	139	193	165
Sweden <sup>k</sup>	2,767*	107*	114	104	131	126	96	102	128	124
Switzerland <sup>k</sup>	1,061	123	130	103	147	155	117	116	152	159
United Kingdom <sup>l</sup>	5,492	120	130	127	153	122	118	120	140	118
<i>Butter<sup>m</sup></i>	(Thousands of tons)									
Austria <sup>i</sup>	1.0	159	136	148	130	138	128	107	106	127
Czechoslovakia	1.6	156	..	..	..	..	..	..	..	..
Denmark	10.4	125	144	115	169	163	128	118	163	147
Germany : western zones	14.5	136	149	114	168	175	137	121	179*	187
Ireland <sup>n</sup>	2.2	132*	142	34	193	248	92	23	154	223
Netherlands <sup>o</sup>	4.4	160	178	122	246	211	132	111	214	194
Norway	0.7	135	145	109	222	176	75	106	212	176
Portugal	0.1	125	213	213	250	213	163	200	275	..
Sweden	7.9	103	114	96	132	134	96	95	130	133
Switzerland	1.2	98	127	81	145	160	119	144*	196*	192
United Kingdom	0.6	156	242	209	507	196	61	91	132	82
<i>Cheese<sup>m</sup></i>	(Thousands of tons)									
Austria <sup>i</sup>	0.3	227*	291	300	396	278	190	291	346	268
Czechoslovakia	1.0	118	..	..	..	..	..	..	..	..
Denmark	3.8	139*	129	108	142	147	118	139	208	184
Germany : western zones	6.5*	192*	174*	142*	175*	195	183*	189*	214*	192
Ireland	0.3	104	100	15	130	159	93	15	15	133
Netherlands <sup>o</sup>	5.4	199	197	102	248	279	159	115	277	296
Norway	1.0	182*	218	199	312	228	133	207	337	285
Portugal	0.1	130	100	100	90	110	100	100	130	..
Sweden	4.0	137	108	108	135*	109	80	112	137	126
Switzerland	3.0	136	143	76	178	207	110	64	155	196
United Kingdom <sup>o</sup>	1.4	199*	330	306	500	380	137	262	370	324

<sup>a</sup> Comprising production of beef, veal, mutton, lamb, pork and goat meat, unless otherwise stated.

<sup>b</sup> Including horse meat. The figure in the first column refers to 1948 and the index numbers are based on that year.

<sup>c</sup> Including horse meat and slaughter fat. The figure in the first column refers to 1949 and the index numbers are based on that year.

<sup>d</sup> Data for communes of more than 50,000 inhabitants.

<sup>e</sup> Inspected slaughter.

<sup>f</sup> Excluding home slaughter.

<sup>g</sup> Slaughtering in 43 towns.

<sup>h</sup> Total production of fluid milk.

<sup>i</sup> Market deliveries.

<sup>j</sup> The figure in the first column refers to 1948, and the index numbers are based on that year.

<sup>k</sup> Milk delivered by farmers.

<sup>l</sup> Milk sold through milk marketing schemes.

<sup>m</sup> Creamery and factory production.

<sup>n</sup> Production of co-operative creameries only.

<sup>o</sup> Including farm production.

**Table XVI**  
**INDEX NUMBERS OF THE VALUE OF RETAIL SALES**  
*Corresponding period of previous year = 100*

Country and item		1950			1951		
		Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
Austria	Total . . . . .	..	..	..	132	128	130
	Food . . . . .	..	..	..	121	123	124
	Clothing . . . . .	..	..	..	160	137	135
Belgium	Total <sup>a</sup> . . . . .	106	131	105	127	112	89
	Textiles . . . . .	106	127	100	131	101	83
Denmark	Total . . . . .	109	117	111	110	107	95
	Food . . . . .	106	108	106	107	106	101
	Clothing . . . . .	114	136	117	114	105	84
France	Food <sup>b</sup> . . . . .	..	..	..	123	112	101
	Depart. stores (mainly textiles)	121	136	121	147	137	121
Germany : western zones	Total . . . . .	108	117	114	129	116	104
	Food . . . . .	98	105	103	115	112	107
	Clothing . . . . .	128	138	122	142	111	96
Italy	Total <sup>c</sup> . . . . .	112	114	134	164	142	137
Netherlands	Total . . . . .	108	116	103	120	107	..
	Food . . . . .	106	114	106	113	110	..
	Durable goods . .	107	132	98	142	101	..
Sweden	Food . . . . .	104	104	102	108	109	111
	Clothing . . . . .	97	107	115	106	111	105
Switzerland	Total . . . . .	99	110 <sup>a</sup>	108	114	107	101
	Food . . . . .	103	111	103	110	102	98
	Clothing . . . . .	95	110	114	116	109	100
United Kingdom	Total . . . . .	105	107	107	111	110	105
	Food . . . . .	106	105	105	106	108	109
	Clothing . . . . .	98	115	107	122	110	93

Sources : See "Notes to the Statistics".

NOTE. — The index numbers generally refer either to a sample of all retail trade, to co-operatives or to department stores. For the Netherlands

and the United Kingdom, the index numbers are derived from estimates of consumers' expenditure.

<sup>a</sup> Sales by co-operative network.

<sup>b</sup> Sales by private retailers.

<sup>c</sup> Sales by department stores.



**Table XVII**  
**INDEX NUMBERS OF THE COST OF LIVING**

Country	1938 = 100		1948 = 100											
	1949	1950	1950			1951								
			Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept. Oct.
Austria . . . . .	411	465	153	156	158	162	163	168	165	166	173	189	198	199 208
Belgium . . . . .	342	339	100	99	98	101	102	104	104	104	105	105	106	107 108
Denmark . . . . .	168	176	109	..	..	113	..	..	117	..	..	120	..	.. 121
Finland . . . . .	808	921	122	125	127	131	131	132	133	134	135	136	138	140 139
France . . . . .	1,817	2,020	..	..	135	137	139	142	144	149	149	149	151	153 156
Germany :														
U.K./U.S. Zone <sup>a</sup> .	160	151	93	93	94	95	97	100	101	102	103	103	102	102 104
Greece . . . . .	28,370	30,600	130	130	131	133	136	142	138	143	139	137	137	137 142
Iceland <sup>b</sup> . . . . .	428	511	135	140	141	142	144	146	149	151	155	157	159	164 166
Ireland . . . . .	185	187	..	103	..	..	104	..	..	110	..	..	112	.. ..
Italy . . . . .	4,985	4,854	102	103	103	105	107	107	110	110	111	111	111	111 111
Luxembourg . . . . .	310	322	113	113	114	113	115	117	120	119	120	121	121	120 ..
Netherlands <sup>c d</sup> . . .	219	239	121	121	121	121	123	125	130	130	129	130	129	129 129
Norway <sup>e</sup> . . . . .	159	167	109	111	112	113	114	115	120	122	124	126	126	126 126
Poland . . . . .	..	..	113	114	116	114	115	115	114	..	..	..	..	.. ..
Portugal <sup>f</sup> . . . . .	209 <sup>a</sup>	209 <sup>a</sup>	103 <sup>a</sup>	103 <sup>a</sup>	103	101 <sup>a</sup>	101 <sup>a</sup>	101 <sup>a</sup>	99 <sup>a</sup>	99	99 <sup>a</sup>	97	97	97 ..
Spain <sup>g</sup> . . . . .	478	529	120	122	124	126	128	129	128	128	128	127	128	128 128
Sweden . . . . .	157	159	..	..	105	..	..	115	..	..	120	..	..	123 ..
Switzerland <sup>e</sup> . . . .	162	159	99	99	99	100	100	100	101	102	102	103	103	104 104
Turkey . . . . .	355	340	98	99	100	101	103	102	103 <sup>a</sup>	103	102 <sup>a</sup>	100	100	100 ..
United Kingdom . . .	185	191	106	107	107	108	109	110	112	115	116	117	118	119 119

Sources : See "Notes to the Statistics".

<sup>a</sup> Monthly index numbers are based on 1949 = 100.

<sup>b</sup> Yearly averages are based on first quarter 1939 = 100.

<sup>c</sup> Yearly averages are based on 1938/39 = 100.

<sup>d</sup> From January 1950, new series.

<sup>e</sup> From March 1950, new series.

<sup>f</sup> Yearly averages are based on July 1938/June 1939 = 100.

<sup>g</sup> Yearly averages are based on July 1936 = 100.

Table XVIII  
INDEX NUMBERS OF WHOLESALE PRICES

Country	1938 = 100		1948 = 100												
	1949	1950	1950			1951									
			Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.
Austria <sup>a</sup> . . . . .	418	553	184	185	187	194	201	206	217	217	222	244	242	242	242
Belgium . . . . .	372	391	109	110	113	117	121	123	123	122	122	121	120	119	122
Denmark . . . . .	233	262	120	125	129	134	138	142	146	150	154	152	151	148	148
Finland . . . . .	963	1,110	126	127	132	146	150	155	159	163	167	170	176	176	175
France <sup>b</sup> . . . . .	1,917	2,076	127	131	135	138	146	150	158	158	154	151	150	154	163
Germany : U.K./U.S. Zone <sup>c</sup> .	185	183	101	102	106	111	115	118	120	120	120	119	120	119	121
Greece . . . . .	30,300	31,460	127	133	136	140	144	148	152	153	150	150	147	149	153
Ireland <sup>d</sup> . . . . .	231	244	108	110	113	115	116	118	120	123	122	122	121	123	125
Italy . . . . .	5,169	4,905	95	97	100	104	105	105	105	104	103	102	102	100	100
Netherlands <sup>e</sup> . . . .	289	322	122	125	128	136	139	144	145	146	145	142	142	142	143
Norway . . . . .	184	209	125	126	127	129	134	135	139	143	147	147	146	147	147
Portugal . . . . .	246	243	99	100	100	102	110	110	110	108	110	109	111	111	..
Spain <sup>f</sup> . . . . .	483	570	142	146	150	158	159	161	160	164	160	160	159	164	165
Sweden . . . . .	195	205	107	114	118	124	128	134	139	141	143	143	142	142	143
Switzerland . . . . .	206	203	98	100	101	104	106	107	106	107	105	103	103	103	105
Turkey. . . . .	503	452	96	99	101	104	110	111	107	104	101	98	96	99	101
United Kingdom . . .	227	259	127	132	133	137	139	143	145	146	146	146	148	148	150
United States . . . .	197	205	102	104	106	109	111	112	111	111	110	109	108	108	108

<sup>a</sup> Yearly averages are based on March 1938 = 100.

<sup>b</sup> From January 1950, new series.

<sup>c</sup> Producers' prices of industrial products ; monthly averages are based on 1949 = 100.

<sup>d</sup> Yearly averages are based on October 1938 = 100.

<sup>e</sup> From 1949, new series.

<sup>f</sup> Yearly averages are based on 1936 = 100.

**Table XIX**  
**PRICE MOVEMENTS OF WOOD PRODUCTS**

*Index numbers — December 1949 = 100*

Product	Country where quoted	Type of price	March 1950	June 1950	Sept. 1950	Dec. 1950	March 1951	June 1951	Sept. 1951
Sawlogs . . . . .	Sweden <sup>a</sup>	Domestic	..	..	..	150	..	..	250
Pitprops . . . . .	Finland	Unit value of exports	..	100	98	129	..	113	156
	France	Wholesale	100	100	100	100	100	115	132
	United Kingdom	Unit value of imports	92	93	96	97	113	140	175
Pulpwood . . . . .	France	Wholesale	100	112	112	112	164	164	164
Sawnwood . . . . .	Sweden	Export price	104	106	111	150	175	179	179
	Finland	Unit value of exports	106	107	113	122	143	163	170
	Austria	Wholesale	105	105	113	132	203	207	218
	West. Germany	Wholesale	94	86	86	104	121	122	128
	United Kingdom	Import price	100	95	95	95	142	156	156
	United States	Wholesale	107	..	141	124	133	130	130
Mechanical pulp . .	Sweden	Unit value of exports	118	119	128	158	191	230	281
	Finland	Unit value of exports	100	120	124	151	234	287	332
	Finland	Unit value of exports to U.S.	97	96	96	..	222	227	244
Chemical pulp . . .	Sweden <sup>b</sup>	Unit value of exports	116	121	133	168	203	290	329
	Finland <sup>c</sup>	Unit value of exports	100	115	137	188	290	340	538
	Finland <sup>c</sup>	Unit value of exports to U.S.	104	109	138	220	236	309	312
	Austria	Wholesale	100	116	116	116	116	151	161
	West. Germany	Wholesale price index	94	96	104	104	172	171	169
	United Kingdom	Import price	100	119	153	208	276	336	341
	United States	Wholesale U.S. and Canadian produce	100	100	105	111	119	119	119
Dissolving pulp . .	Sweden	Unit value of exports	106	112	119	135	190	289	294
Newsprint . . . . .	Sweden	Unit value of exports	104	108	123	139	196	248	257
	Finland	Unit value of exports	114	114	125	136	162	209	232
	Finland	Unit value of exports to U.S.	121	125	132	135	141	141	162
	France	Wholesale domestic produce	100	109	109	127	165	179	226
	United States	Wholesale U.S. and Canadian produce	100	100	100	106	106	106	116
Kraft paper . . . .	Sweden	Unit value of exports	95	102	108	129	179	237	266
	Finland	Unit value of exports	108	110	113	116	169	205	203

Sources: See "Notes to the Statistics".

<sup>a</sup> Root value of roundwood suitable for sawlogs, pulpwood and pitprops.

<sup>b</sup> Sulphite bleached.

<sup>c</sup> Sulphate unbleached.

Table XX

**EUROPEAN PAYMENTS UNION : MONTHLY BALANCES OF EACH MEMBER  
WITH THE E.P.U. AREA AND THE FINANCING OF CUMULATIVE NET POSITIONS**

*Monthly averages ; millions of units of account (equivalent to one U.S. dollar)*

	CREDITOR COUNTRIES					DEBTOR COUNTRIES								
	Belgium-Luxemb.	Italy	Switzer-land	Sweden	Portugal	Western Germany	United Kingdom <sup>a</sup>	Nether-lands	Turkey	Den-mark	Norway	Iceland	Austria	Greece
<i>Intra-European Payments Schemes :</i>														
1949 First quarter . . . . .	+21.5	+24.3	+6.7	+0.3	-12.1	+15.4	+25.3	-19.2	+35.9	+2.8	-1.9	-8.0	-11.5	-7.8
Second quarter . . . . .	+39.5	+27.5	+14.9	+6.0	-9.3	+5.9	-31.8	-12.8	-11.1	-2.5	+5.2	-7.3	-11.1	-13.1
Third quarter . . . . .	+33.0	+30.0	+7.8	+18.4	+2.8	+12.5	-134.9	+49.0	+3.5	-2.9	+6.0	-8.3	-4.3	-13.8
Fourth quarter . . . . .	-1.4	-0.7	+1.9	+13.3	+0.7	-38.8	+40.5	+1.0	+3.5	+7.5	+4.0	-12.6	-9.0	-9.7
1950 First quarter . . . . .	+26.0	+1.7	+4.0	-0.4	-1.2	-43.2	+70.4	-3.5	-20.4	-1.8	-4.5	-12.0	-10.0	-5.3
Second quarter . . . . .	+35.5	-1.1	-4.0	-4.9	-4.2	+20.5	+25.9	+25.8	-22.1	-32.6	-7.3	-7.0	-5.6	-18.8
<i>European Payments Union</i>														
1950 Third quarter . . . . .	-0.9	+0.6	-9.3	+2.7	+6.3	-59.1	+36.9	+63.5	-13.5	+0.4	-6.3	-3.7	-0.6	-14.3
Fourth quarter . . . . .	+2.9	-11.1	-14.7	-7.2	+6.6	-60.8	+135.2	+9.7	-21.8	+2.1	-7.4	-13.5	-0.5	-9.8
1951 First quarter . . . . .	+27.9	-17.5	+13.0	-10.0	+8.9	-29.6	+52.8	+19.5	-28.4	-6.2	-0.3	-7.6	-0.2	-15.0
Second quarter . . . . .	+48.9	+17.7	-5.1	-8.0	-1.5	+57.7	-9.0	-25.2	-26.0	-17.7	-9.1	-2.1	-1.0	-7.2
Third quarter . . . . .	+62.7	-43.3	+21.9	+22.8	+4.1	+55.6	-171.3	-35.8	+16.7	-11.5	-0.3	+1.4	-0.5	-6.6
October . . . . .	+42.9	+62.9	+36.8	+81.6	+16.8	+96.8	-235.6	-168.7	+73.2	-2.0	+6.2	+4.5	-5.5	-10.1
November . . . . .	+79.8	+21.5	+15.2	+31.8	+5.1	+9.6	-177.8	-48.2	+51.3	+6.5	+20.4	+2.2	-5.4	-11.8
December . . . . .	+55.0	+10.4	+12.5	+55.2	+3.7	+44.1	-148.7	-69.4	+44.9	-4.4	+9.9	-8.0	-0.5	-4.7
Cumulative net position July 1950-December 1951 . . . . .	+601.5	+194.7	+141.2	+177.5	+96.5	+36.0	-471.8	-199.7	-50.0	-98.2	-32.3	-69.6	-8.5	-130.6
Net use of "existing resources" by (-) or on (+) partners <sup>c</sup> . . . . .	+15.8	+42.5	-	+15.4	-	+11.9	-93.1	+12.9	-	-1.9	-5.0	+0.4	-	+1.1
Use of "special resources" (+) <sup>d</sup> . . . . .	-	-	-	-	-	-	-	-	-	+22.0	-	-	+4.5	+33.0
Use of initial credit (+) or debit (-) balances <sup>e</sup> . . . . .	-29.4	-	-	-21.2	-	-	-150.0	-	+30.0	+25.0 <sup>f</sup>	-	+60.0 <sup>g</sup>	+4.0	+80.0
Accounting surplus (+) or deficit (-) <sup>h</sup> . . . . .	+590.71	+237.71	+141.9	+171.4	+97.41	+43.3	-712.1	-184.0	-23.1	-53.8	-38.5	-9.7	-17.6	-
Credit granted by (-) or to (+) member <sup>j</sup> . . . . .	-341.3	-139.3	-96.0	-111.7	-56.9	-43.3	+539.2	+168.0	+23.1	+30.0	+38.5	+9.7	-	-
Gold paid to (-) or by (+) member <sup>j</sup> . . . . .	-249.4	-98.3	-46.0	-59.7	-40.5	-	+172.9	+16.0	-	+23.8	-	-	+17.6	-
Amount of quota . . . . .	360 k	205	250	260	70	500	1,060	520	355	50	195	200	15	70
Per cent of quota used . . . . .	179	116	57	66	139	9	67	35	7	108	20	5	0	01

Sources : General Statistical Bulletin, Organization for European Economic Co-operation, Paris, November 1951, and monthly reports of the Bank for International Settlements, Basle.  
 a Including all sterling area countries except Iceland.  
 b The solid line indicates the beginning of E.P.U. operations. Switzerland joined the Union in November 1950.

c Certain holdings of currencies of E.P.U. countries at the beginning of July 1950.

d Financing of the deficits of Turkey, Iceland, Austria and Greece with dollars allotted by the E.C.A.

e Initial balances are grants given to or obtained from the Union and compensated by equivalent amounts of conditional dollar aid given by the E.C.A.

f In the form of a loan, repayable to the Union.

g Of which 10 million units of account in the form of a loan, repayable to the Union.

h After adjustment for interest charges received or paid by the Union.

i The quota for each country is determined according to special agreements, partly in gold and partly in credit.

k The Belgian quota can be used to cover Belgian surpluses up to 330.6 million units of account only.

l The Austrian and Greek quotas cannot be used before 1 July 1952 to cover any deficits.

Creditor countries		Debtor countries	
Gold	Credit	Gold	Credit
First 20 per cent . . . . .	20	20	4
Second 20 per cent . . . . .	10	16	5
Third 20 per cent . . . . .	10	12	8
Fourth 20 per cent . . . . .	10	10	12
Fifth 20 per cent . . . . .	10	4	16
Total . . . . .	60	60	40





**Table XXII**  
**INDEX NUMBERS OF UNIT VALUES FOR TOTAL IMPORTS AND EXPORTS**  
*Janu a-September 1949 = 100*

Country	Type of index <sup>a</sup>	In national currencies												In U.S. dollars		Terms of trade <sup>b</sup>								
		Imports						Exports						Imp.	Exp.	1950			1951					
		1950			1951			1950			1951					1950			1951					
		1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	1st qtr.	2nd qtr.	3rd qtr.		
United Kingdom . . .	P <sub>3</sub> <sup>c</sup>	109	115	119	130	147	166	165	103	105	107	111	116	125	132	115	91	106	107	106	115	124	126	121
France . . . . .	P <sub>1</sub>	108	109	110	119	133	147	149	103	101	99	102	109	117	122	114	94	105	108	111	117	123	126	122
Netherlands . . . . .	P <sub>1</sub>	107	112	113	120	128	140	142	107	105	98	108	115	123	122	98	85	99	107	115	111	112	114	116
Belgium-Luxembourg .	P <sub>1</sub>	95	98	100	110	120	126	125	85	85	89	95	109	117	122	110	107	111	115	113	116	110	108	102
Switzerland . . . . .	P <sub>2</sub>	87	85	86	91	100	108	109	94	95	93	97	99	102	106	109	106	93	90	92	94	101	105	103
Italy . . . . .	P <sub>4</sub>	93	92	92	98	112	126	126	105	93	94	95	101	110	115	113	102	89	98	97	103	112	115	110
Turkey . . . . .	P <sub>1</sub>	81	82	79	82	88	102	95	106	98	96	131	152	118	115	95	115	76	84	82	62	58	86	83
Denmark . . . . .	P <sub>1</sub>	111	110	115	113	123	145	153	103	98	99	101	106	107	110	107	76	108	112	116	112	116	136	140
Sweden . . . . .	P <sub>3</sub>	109	111	112	120	128	143	150	100	102	105	116	136	164	182	104	126	108	109	107	103	95	88	83
Norway . . . . .	P <sub>1</sub>	110	114	115	117	128	142	146	98	100	109	112	123	141	149	101	104	113	114	107	105	103	100	98
Finland <sup>d</sup> . . . . .	P <sub>2</sub>	124	133	138	152	169	193	199	109	113	119	135	197	231	271	117	160	114	118	116	113	86	84	73
Western Germany <sup>e</sup> .	P <sub>1</sub>	113	115	115	126	136	152	159	91	92	90	92	100	108	116	123	97	117	118	119	127	127	130	127
Austria <sup>f</sup> . . . . .	P <sub>1</sub>	150	162	157	161	219	228	229	138	141	146	147	162	184	203	109	96	109	116	108	110	135	124	113
United States . . . . .	P <sub>4</sub>	98	101	110	119	131	138	138	94	93	96	102	107	112	110	138	110	105	109	115	117	122	123	126

<sup>a</sup> Sources and methods: See "Notes to the Statistics".

<sup>b</sup> P<sub>1</sub> = unit value index with moving current weights.

<sup>c</sup> P<sub>2</sub> = unit value index with fixed weights.

<sup>d</sup> P<sub>3</sub> = unit value index with moving anterior weights.

<sup>e</sup> P<sub>4</sub> = unit value index with moving crossed weights.

<sup>f</sup> The ratio of the import price index to the export price index.

<sup>c</sup> P<sub>1</sub> for terms of trade.

<sup>d</sup> January-June 1949 = 100.

<sup>e</sup> New series, with the year 1950 as original basis. Terms of trade on a U.S. dollar basis. See "Notes to the Statistics".

<sup>f</sup> Commercial imports only.

Table XXIII  
IMPORT AND EXPORT UNIT VALUES FOR MAJOR COMMODITY GROUPS

Index numbers—January–September 1949 = 100

Commodity group	Country	Type of index <sup>a</sup>	In national currencies							In U.S. dollars
			1950				1951			1951
			First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Third quarter
<i>Imports</i>										
Food, drink and tobacco . . . . .	United Kingdom	P <sub>3</sub>	108	113	113	116	119	129	131	91
	France	P <sub>1</sub>	103	107	107	107	107	119	123	95
	Switzerland	P <sub>2</sub>	90	88	89	95	98	105	105	105
	Western Germany	P <sub>1</sub>	129	130	126	133	133	146	157	118
	United States	P <sub>4</sub>	119	121	134	138	143	143	142	142
Raw materials . . . .	United Kingdom	P <sub>3</sub>	112	119	129	151	189	222	211	147
	France	P <sub>1</sub>	107	110	109	137	146	161	159	122
	Switzerland	P <sub>2</sub>	84	82	84	92	106	118	120	120
	Western Germany	P <sub>1</sub>	107	111	116	136	157	184	189	146
	United States	P <sub>4</sub>	94	97	108	128	152	171	159	159
Manufactures . . . .	United Kingdom	P <sub>3</sub>	110	111	114	122	131	146	155	108
	France	P <sub>1</sub>	125	105	111	125	131	136	139	107
	Switzerland	P <sub>2</sub>	88	87	85	88	96	99	103	103
	Italy	P <sub>4</sub>	92	93	92	96	110	128	128	114
	Western Germany	P <sub>1</sub>	107	106	104	111	124	130	133	106
	United States	P <sub>4</sub>	89	90	96	104	111	114	121	121
<i>Exports</i>										
Textile goods . . . .	United Kingdom	P <sub>3</sub>	101	105	108	115	127	143	155	107
	France	P <sub>1</sub>	97	99	100	100	115	127	132	101
	Switzerland	P <sub>1</sub>	85	88	86	90	96	101	95	95
	Italy	P <sub>4</sub>	110	82	91	93	110	118	126	112
Metal goods . . . .	United Kingdom	P <sub>3</sub>	104	104	105	107	111	116	121	84
	France	P <sub>1</sub>	104	99	93	93	102	112	124	95
	Switzerland	P <sub>1</sub>	102	102	99	101	99	99	107	107
	Italy	P <sub>4</sub>	102	100	97	90	89	94	103	91
	Sweden	P <sub>3</sub>	105	100	99	99	105	111	122	85
All manufactures . .	United Kingdom	P <sub>3</sub>	102	103	105	109	115	122	130	90
	France	P <sub>1</sub>	104	106	105	107	115	120	128	99
	Belgium-Luxemb.	P <sub>1</sub>	84	84	86	92	104	113	120	106
	Switzerland	P <sub>2</sub>	95	97	94	97	98	101	106	106
	Italy	P <sub>4</sub>	96	89	94	94	99	108	115	103
	Sweden	P <sub>3</sub>	99	97	99	104	122	138	153	106
	Western Germany	P <sub>1</sub>	94	94	91	93	101	113	121	104
	United States	P <sub>4</sub>	96	94	95	101	106	110	110	110

Sources and methods: See "Notes to the Statistics".

NOTE. — Owing to the large discrepancies in the type and coverage of the commodity group indices, inter-country comparisons should be made with caution.

<sup>a</sup> P<sub>1</sub> = unit value index with moving current weights.  
P<sub>2</sub> = unit value index with fixed weights.  
P<sub>3</sub> = unit value index with moving anterior weights.  
P<sub>4</sub> = unit value index with moving crossed weights.

**Table XXIV**  
**AVERAGE EXPORT UNIT VALUES FOR COTTON CLOTH AND ARTIFICIAL SILK YARNS AND CLOTH**  
*First 9 months of each year*  
*United States cents per kilogramme*

Commodity	Year	United Kingdom	Netherlands	France	W. Germany	Belgium-Luxemb.	Italy	United States	Japan <sup>a</sup>	India
Cotton cloth, grey, unbleached . . . . .	1949	279	248	254	209	197	212	138	159	149
	1950	214	213	214	193	184	192	146	134	108
	1951	292	286	284	255	238	274	184	221	125
Cotton cloth, white, bleached . . . . .	1949	397	325	339	284	248	317	289	..	313
	1950	298	221	279	227	218	219	310	..	191
	1951	355	275	317	316	301	325	393	..	238
Cotton cloth, printed . .	1949	455	499	438	342	386	400	256	230 <sup>b</sup>	339 <sup>c</sup>
	1950	317	342	351	286	314	299	251	199 <sup>b</sup>	207 <sup>c</sup>
	1951	392	401	396	390	417	395	330	317 <sup>b</sup>	231 <sup>c</sup>
Cotton cloth, dyed in the piece . . . . .	1949	402	387	365	277	288	329	258	..	..
	1950	294	298	291	296	266	271	254	..	..
	1951	360	354	335	405	381	341	332	..	..
Cotton cloth, coloured .	1949	499	408	394	284	258	346	255	..	..
	1950	341	288	299	290	248	283	246	..	..
	1951	421	347	338	381	308	358	325	..	..
Artificial silk yarn . . .	1949	262	297	228	192	313	236	189	..	..
	1950	197	169	148	204	200	170	181	..	..
	1951	252	205	200	236	241	207	208	269	..
Artificial silk cloth, printed	1949	744	779 <sup>c</sup>	934	511 <sup>d</sup>	..	563	413	264 <sup>d</sup>	..
	1950	541	514 <sup>c</sup>	596	622 <sup>d</sup>	..	433	408	247 <sup>d</sup>	..
	1951	591	555 <sup>c</sup>	600	571 <sup>d</sup>	..	582	464	365 <sup>d</sup>	..
Artificial silk cloth, dyed	1949	655	..	734	..	..	534	377	..	..
	1950	448	..	482	..	..	403	352	..	..
	1951	495	..	495	..	..	536	410	..	..

Sources and methods: See "Notes to the Statistics".  
<sup>a</sup> 1951 prices calculated on the basis of exports of first 6 months.  
<sup>b</sup> All cotton cloth except grey.

<sup>c</sup> Dyed, printed and coloured.  
<sup>d</sup> Dyed and printed.



**Table XXV**  
**EXPORTS OF FIVE EUROPEAN COUNTRIES TO EUROPE AND TO OVERSEAS BY COMMODITY GROUPS**  
*Millions of dollars at January-September 1949 prices*  
*Quarters and quarterly averages*

Commodity group and destination Exporting country and period	1. FOOD, DRINK AND TOBACCO	2. RAW MATERIALS	3. METALS AND MANUFACTURES	4. MACHINERY	5, 6. VEHICLES AND OTHER TRANSPORT EQUIPMENT	7. CHEMICALS AND RELATED PRODUCTS	8. TEXTILES AND MANUFACTURES	TOTAL, <sup>a</sup> Groups 1-10
	Europe Overseas	Europe Overseas	Europe Overseas	Europe Overseas	Europe Overseas	Europe Overseas	Europe Overseas	Europe Overseas
United Kingdom	1950-I-III average	86	53	116	112	28	109	640
	IV	82	54	119	96	32	124	652
	1951-I	67	44	110	126	36	123	653
	II	57	55	125	136	40	119	666
France	1950-I-III average	93	47	17	21	24	87	569
	IV	94	46	18	28	29	55	390
	1951-I	76	47	22	26	28	79	516
	II	66	46	26	23	29	62	507
Western Germany	1950-I-III average	87	62	22	17	27	37	443
	IV	7	115	87	28	49	19	357
	1951-I	141	127	115	39	73	30	474
	II	137	105	112	37	82	31	628
Belgium-Luxembourg	1950-I-III average	55	12	24	8	30	70	318
	IV	75	26	22	9	30	78	378
	1951-I	83	34	21	6	33	67	387
	II	66	28	23	8	35	73	399
Italy	1950-I-III average	23	17	19	11	4	61	198
	IV	29	16	24	13	5	70	239
	1951-I	30	11	23	18	5	65	230
	II	28	16	22	14	7	78	220
Total of countries listed	1950-I-III average	398	136	263	180	135	314	2,020
	IV	429	154	298	185	169	381	2,413
	1951-I	393	151	288	213	184	359	2,382
	II	364	164	328	222	198	361	2,372
	1950-I-III average	59	12	20	11	8	68	211
	IV	11	14	21	12	8	54	211
	1951-I	11	14	21	12	8	54	211
	II	11	14	21	12	8	54	211

Note. — For sources and a definition of the commodity groups, see "Notes to the Statistics".  
<sup>a</sup> In addition to the groups specified, groups 9 (all other manufactures) and 10 (unspecified) are included.

Table

EXPORTS FROM SELECTED EUROPEAN COUNTRIES AND FROM THE UNITED STATES

*Millions of dollars at January-  
Annual rates for first*

Commodity group and destination  Exporting country and year	4. MACHINERY					5, 6. VEHICLES AND OTHER TRANSPORT EQUIPMENT				
	Western Europe	Eastern Europe	United States and Canada	Rest of world	All desti- nations	Western Europe	Eastern Europe	United States and Canada	Rest of world	All desti- nations
United Kingdom . . . . . 1949	327	65	36	1,007	1,435	333	8	88	730	1,159
1950	396	68	54	1,000	1,518	445	4	160	909	1,518
1951	428	38	84	1,051	1,601	488	5	131	911	1,535
Western Germany . . . . . 1949	98	9	2	15	124	27	1	—	4	32
1950	303	43	7	76	429	102	9	1	17	129
1951	473	32	20	216	741	151	3	3	70	227
France . . . . . 1949	54	12	2	195	263	66	7	1	137	211
1950	55	11	1	201	268	76	7	2	157	242
1951	75	18	5	282	380	86	2	6	239	333
Belgium-Luxembourg . . . 1949	80	15	1	44	140	55	2	—	21	78
1950	76	19	1	41	137	30	2	—	22	54
1951	78	7	3	53	141	30	3	12	35	80
Italy . . . . . 1949	34	32	2	76	144	47	9	—	36	92
1950	38	38	4	57	137	36	7	—	48	91
1951	49	36	8	80	173	45	12	1	49	107
Switzerland <sup>a</sup> . . . . . 1949	120	28	4	60	212	7	1	—	2	10
1950	135	29	4	60	228	6	1	—	2	9
1951	145	33	10	74	262	5	1	—	3	9
Total of countries listed. 1949	713	161	47	1,397	2,318	535	28	89	930	1,582
1950	1,003	208	71	1,435	2,717	695	30	163	1,155	2,043
1951	1,248	164	130	1,756	3,298	805	26	153	1,307	2,291
United States <sup>b</sup> . . . . . 1949	489	9	380	1,184	2,062	261	2	286	886	1,435
1950	495	19	346	816	1,676	196	3	264	692	1,155
1951 <sup>c</sup>	469	9	562	1,249	2,289	169	1	366	1,027	1,563
Japan . . . . . 1949	—	—	3	49	52	—	—	—	—	—
1950	1	—	7	29	37	9	—	—	14	23
1951 <sup>d</sup>	1	—	7	58	66	7	—	—	36	43

NOTE. — For sources and a definition of the commodity groups, see "Notes to the Statistics".

<sup>a</sup> Figures in the columns "United States and Canada" relate to exports to the United States only.

XXVI

AND JAPAN BY AREAS OF DESTINATION AND SELECTED COMMODITY GROUPS

September 1949 prices  
9 months of each year

8. TEXTILES					TOTAL, GROUPS 1-10					Commodity group and destination	Exporting country and year
Western Europe	Eastern Europe	United States and Canada	Rest of world	All desti- nations	Western Europe	Eastern Europe	United States and Canada	Rest of world	All desti- nations		
275	11	164	1,024	1,474	1,877	133	512	4,522	7,044	1949	United Kingdom
428	10	196	844	1,478	2,440	122	821	4,653	8,036	1950	
433	6	222	954	1,615	2,427	91	914	5,014	8,446	1951	
54	—	4	29	87	903	41	52	125	1,121	1949	Western Germany
73	2	7	14	96	1,738	156	109	374	2,377	1950	
128	2	10	44	184	2,426	123	302	925	3,776	1951	
165	4	16	369	554	1,092	76	62	1,528	2,758	1949	France
219	1	30	386	636	1,503	57	130	1,842	3,532	1950	
228	2	34	468	732	1,698	45	335	2,443	4,521	1951	
161	10	20	68	259	1,109	97	114	479	1,799	1949	Belgium-Luxembourg
271	10	33	25	339	1,192	78	168	392	1,830	1950	
270	9	29	48	356	1,475	64	229	610	2,378	1951	
113	11	7	228	359	479	79	45	512	1,115	1949	Italy
232	14	16	184	446	701	93	75	461	1,330	1950	
272	10	29	227	538	796	85	115	513	1,509	1951	
66	4	9	29	108	404	61	92	212	769	1949	Switzerland <sup>a</sup>
87	3	17	22	129	442	57	113	206	818	1950	
99	4	15	40	158	555	64	131	334	1,084	1951	
834	40	220	1,747	2,841	5,864	487	877	7,378	14,606	1949	Total of countries listed
1,310	40	299	1,475	3,124	8,016	563	1,416	7,928	17,923	1950	
1,430	33	339	1,781	3,583	9,377	472	2,026	9,839	21,714	1951	
87	3	72	527	689	4,197	81	1,931	5,927	12,136	1949	United States <sup>b</sup>
71	1	60	350	482	2,989	82	1,893	4,633	9,597	1950	
94	—	89	483	666	3,326	135	2,332	6,166	11,959	1951 <sup>c</sup>	
62	—	29	207	298	77	—	83	361	521	1949	Japan
49	—	55	293	397	98	—	222	539	859	1950	
42	—	37	433	512	100	—	169	844	1,113	1951 <sup>d</sup>	

<sup>b</sup> Excluding "special category commodities" from June 1950 onwards.  
<sup>c</sup> Based on first 8 months of the year.

<sup>d</sup> Based on first 6 months of the year.

**Table XXVII**

**IMPORTS AND EXPORTS OF EIGHTEEN EUROPEAN COUNTRIES AND THE UNITED STATES  
ACCORDING TO AREAS OF ORIGIN AND DESTINATION**

*Millions of dollars at current prices ; imports c.i.f. ; exports f.o.b.*

Area of origin for imports and area of destination for exports ↓	Year and quarter	United Kingdom Royaume-Uni		Ireland Irlande		Iceland Islande		France		Netherlands Pays-Bas		Belgium-Luxembourg Belgique-Luxembourg		Switzerland Suisse		Italy Italie		Portugal	
		Imp. a	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
I. United Kingdom, Ireland and Iceland	1950- I	39.3	66.2	60.4	34.7	2.2	1.5	27.8	62.5	47.0	44.4	42.7	25.3	20.6	7.9	23.1*	27.3*	10.7	6.8
	II	40.0	60.2	57.5	38.6	1.9	0.8	30.7	68.6	55.2	48.0	46.5	31.1	19.7	7.3	20.5*	34.3*	12.8	6.1
	III	47.9	59.2	56.2	45.4	1.7	0.5	25.3	67.0	50.7	59.3	42.6	30.6	21.2	8.9	19.7*	41.9*	11.9	8.2
	IV	56.9	64.1	62.0	54.6	2.6	1.1	31.7	89.9	58.9	62.3	58.3	49.2	25.4	9.9	19.9*	36.0*	12.5	11.9
	1951- I	45.1	66.5	63.0	37.8	2.0	2.4	40.6	96.8	61.0	76.5	55.7	59.2	27.5	9.8	19.8	40.2	11.1	12.6
	II	46.2	81.1	77.9	39.6	6.3	1.2	35.6	123.3	65.4	87.6	63.0	69.8	26.2	12.7	21.5	55.3	12.9	14.6
	III	52.8	71.9	60.1	48.2	3.7	2.9	43.9	89.6	43.9	76.2	43.3	67.8	20.1	14.5	17.5	69.4	13.1	11.9
II. Western European industrial countries (France, Netherlands, Belgium-Luxembourg, Switzerland)	1950- I	151.6	139.4	6.8	2.3	0.5	1.2	85.0	93.7	121.3	70.3	109.4	149.6	39.5	41.5	50.8*	56.4*	11.6	4.7
	II	169.6	128.6	5.1	1.2	0.6	1.5	73.8	97.8	122.9	61.3	107.1	143.0	40.4	42.9	46.6*	56.3*	19.0	4.8
	III	179.4	135.7	4.8	2.6	0.5	1.0	54.3	110.1	114.7	68.9	115.8	125.9	63.5	42.2	34.9*	52.5*	12.5	7.6
	IV	205.8	147.7	7.1	3.3	0.6	0.4	78.0	157.9	147.2	89.7	152.4	166.2	75.0	48.6	50.3*	64.8*	13.2	10.4
	1951- I	254.5	168.6	8.4	2.5	0.6	0.5	76.5	156.7	164.0	101.1	163.1*	188.5*	79.8	43.7	70.3	68.1	14.5	7.4
	II	286.6	162.2	11.3	1.6	1.3	1.3	93.9	169.4	177.1	95.8	146.4	218.0	78.6	53.8	61.0*	83.3	17.4	7.2
	III	251.2	127.3	8.7	2.4	1.1	1.9	106.4	130.3	138.9	99.3	135.4	202.8	70.4	46.9	53.4	71.5	16.5	6.7
III. Mediterranean and Iberian countries (Italy, Greece, Spain, Portugal, Turkey and miscellaneous continental and non-continental European countries and territories)	1950- I	71.1	62.6	1.8	0.5	0.3	1.6	47.8	30.6	12.0	12.6	14.1	30.2	19.5	25.9	4.5*	7.2*	1.1	2.5
	II	68.1	63.5	2.3	0.1	0.3	0.6	44.6	43.3	10.0	12.8	16.4	31.4	23.0	32.9	6.5	13.1*	1.2	1.8
	III	70.2	62.9	2.4	—	0.4	0.7	25.9	36.7	8.4	11.0	13.0	20.6	24.9	42.6	6.8	14.0*	1.7	1.6
	IV	83.7	62.3	6.6	0.5	0.5	2.3	43.7	48.5	12.3	15.6	18.0	32.8	26.9	49.8	9.2	17.0*	2.1	1.6
	1951- I	101.2	65.7	4.0	0.6	1.1	1.5	48.4	55.9	18.0	15.2	20.9	33.1	29.6	30.3	9.6	19.6	1.5	2.6
	II	119.4	80.6	5.7	0.3	1.0	1.4	63.0	55.6	17.3	16.5	21.9	37.6	27.9	31.3	7.7*	20.0	2.4	3.3
	III	107.5	73.6	3.7	0.3	0.6	2.0	48.7	47.5	11.7	16.2	12.9	37.0	26.0	24.9	7.5	24.5	4.6	3.0
IV. Scandinavian countries (Denmark, Sweden, Norway, Finland)	1950- I	135.4	151.4	4.1	0.5	0.7	0.9	32.9	43.6	26.2	26.0	17.0	25.1	7.8	8.2	16.6*	19.4*	3.1	2.4
	II	177.4	152.6	5.0	0.4	2.4	0.2	23.6	50.3	27.8	26.8	18.9	23.5	6.3	7.6	14.7*	16.7*	2.6	1.7
	III	172.2	144.0	4.8	0.3	1.2	1.0	23.2	37.3	39.3	33.6	17.8	16.8	10.0	8.9	12.2*	10.8*	1.9	2.7
	IV	163.6	157.8	5.8	1.1	1.1	2.8	30.0	53.8	35.9	36.8	28.5	32.4	11.2	12.2	16.0*	19.1*	3.2	2.8
	1951- I	200.9	164.7	6.4	0.4	1.3	1.2	36.6	55.9	36.3	40.9	25.9	42.7	10.8	14.5	17.9	22.0	2.8	2.7
	II	265.7	190.9	8.4	0.4	3.4	0.5	52.2	57.0	43.0	46.5	31.6	60.8	11.9	16.8	25.7*	23.7	3.5	2.2
	III	329.4	171.0	7.5	0.4	1.1	1.5	61.7	49.3	53.8	48.8	35.7	64.3	15.6	15.2	33.0	21.6	3.5	2.3
V. Germany and Austria	1950- I	28.7	34.2	0.9	0.8	0.3	0.3	54.0	47.7	49.9	66.7	34.6	33.4	20.9	23.3	35.1*	29.7*	1.4	0.8
	II	32.6	29.0	1.2	0.1	0.4	—	50.7	48.8	76.4	72.2	37.5	22.4	27.0	18.8	41.7*	29.7*	2.3	0.2
	III	35.0	35.0	1.5	1.5	0.4	0.4	48.4	70.7	71.9	74.7	41.5	31.0	37.5	26.5	38.0*	36.3*	2.9	1.3
	IV	30.9	46.9	1.8	1.8	0.4	1.8	56.6	87.6	79.5	98.8	53.6	44.1	44.6	34.5	43.4*	51.7*	4.3	4.6
	1951- I	40.1	43.9	2.8	0.7	0.4	0.3	51.9	81.8	81.7	69.1	57.1	56.7	49.5	31.6	45.8	46.1	3.7	3.1
	II	60.4	36.4	4.0	0.5	1.3	0.3	70.2	45.3	95.8	53.6	59.8	36.6	60.8	24.3	52.6	30.3	5.1	1.8
	III	76.0	43.1	3.1	0.4	0.6	0.5	84.8	46.3	85.8	84.9	56.7	45.4	61.1	40.4	49.7	43.0	4.9	2.5
VI. Eastern European countries (Czechoslovakia, Poland, Rumania, Hungary, Yugoslavia, Bulgaria)	1950- I	32.6	14.4	0.3	—	1.2	1.1	13.0	12.8	12.8	7.0	6.9	11.2	11.3	11.6	15.0	18.7*	0.6	0.4
	II	26.9	12.0	0.5	0.1	0.8	0.3	7.4	10.3	10.8	9.0	7.5	10.5	10.0	12.3	14.4	15.4*	0.5	0.4
	III	25.8	16.0	0.8	0.1	0.8	0.3	4.7	8.4	7.7	6.8	5.3	10.6	11.5	14.9	11.7*	12.0*	0.5	0.5
	IV	27.6	13.9	2.5	0.1	0.9	1.7	7.5	6.0	12.4	9.9	9.5	8.8	12.9	20.7	15.1	14.4*	0.5	0.5
	1951- I	29.4	14.9	2.5	—	1.2	0.5	12.9	9.9	11.6	10.5	6.8	14.3	13.1	13.3	16.7	16.2	0.3	0.4
	II	32.1	15.8	2.8	—	0.7	0.8	9.4	12.8	7.3	7.8	5.4	14.1	9.4	15.1	16.5*	17.9*	0.4	0.6
	III	30.2	17.7	0.4	—	0.6	0.7	8.8	8.0	3.6	9.0	3.2	11.4	4.4	15.2	13.8	13.4	0.4	0.2
VII. Union of Soviet Socialist Republics	1950- I	19.9	12.2	—	—	—	—	1.0	0.1	1.0	0.1	2.0	3.6	0.5	0.7	5.6*	6.6*	—	0.2
	II	22.4	5.5	—	—	—	—	1.6	0.9	1.2	—	1.7	6.1	0.3	0.8	1.8	5.4*	—	0.3
	III	26.4	7.3	—	—	—	—	0.7	0.9	0.1	—	2.3	5.4	0.7	1.2	1.4	2.8*	—	0.4
	IV	27.1	7.5	—	—	—	—	1.6	0.7	—	0.4	4.9	5.5	0.7	1.3	5.4*	5.1	—	0.4
	1951- I	35.9	3.3	—	—	—	—	1.8	0.2	3.6	0.6	4.7	2.8	1.6	1.3	10.0	5.2	—	0.8
	II	35.5	3.3	—	—	—	—	2.1	0.7	1.2	0.3	4.3	2.3	1.7	2.1	6.3*	3.6	—	0.5
	III	39.2	2.0	—	—	—	—	3.6	0.5	5.9	0.5	4.3	3.4	1.4	1.0	2.7	4.2	—	0.8
VIII. Total Europe (including U.S.S.R.)	1950- I	478.6	480.4	74.3	38.8	5.2	6.6	261.5	291.0	270.2	227.1	226.7	278.4	120.1	119.1	150.7*	165.3*	28.5	17.8
	II	537.0	451.4	71.6	40.5	6.4	3.4	232.4	320.0	304.3	230.1	235.6	268.0	126.7	122.6	146.2*	170.9*	38.4	15.3
	III	556.9	460.1	70.5	49.9	5.0	3.9	182.5	331.1	292.8	254.3	238.3	240.9	169.3	145.2	124.7*	170.3*	31.4	22.3
	IV	595.6	500.2	85.8	61.4	6.1	10.1	249.1	444.4	346.2	313.5	325.2	339.0	196.7	177.0	159.3*	208.1*	35.8	32.2
	1951- I	707.1	527.6	87.1	42.0	6.6	6.4	268.7	457.2	376.2	313.9	334.2*	397.3*	211.9	144.5	190.1	217.4	33.9	29.6
	II	845.9	570.3	110.1	42.4	14.0	5.5	326.4	464.1	407.1	308.1	332.4	439.2	216.5	156.1	191.3*	234.1*	41.7	30.2
	III	886.3	506.6	83.5	51.7	7.7	9.5	357.9	371.5	343.6	334.9	291.5	432.1	199.0	158.1	177.6	247.6	43.0	27.4



Table XXVII

IMPORTATIONS ET EXPORTATIONS DE DIX-HUIT PAYS EUROPÉENS ET DES ÉTATS-UNIS, PAR RÉGIONS  
D'ORIGINE ET DE DESTINATION

En millions de dollars aux prix courants ; importations c.a.f. ; exportations f.o.b.

Greece, Spain and Turkey Grèce, Espagne et Turquie	Denmark Danemark		Sweden Suède		Norway Norvège		Finland Finlande		Western Germany Allemagne occid.		Austria Autriche		Total of eighteen countries Total pour dix-huit pays		United States Etats- Unis		Année et tri- mestre	Région d'origine pour les importations et région de destination pour les exportations  ↓
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.		
25.6 31.2	73.5*	57.3	47.0 32.4	51.0 18.3	14.7 13.2	23.2 20.0	8.2 2.1	517.0 451.1	58.5 143.4	I-1950	I. Royaume-Uni, Irlande et Islande							
27.8 19.7	60.7*	78.7	59.8 42.9	35.8 18.3	13.9 22.0	21.4 19.9	7.6 2.7	511.8 499.2	69.5 108.1	II								
31.0 18.5	63.3*	72.4*	60.5 40.0	31.2 16.0	16.5 29.6	28.3 24.0	6.8 2.8	514.8 524.3	102.6 137.6	III								
28.4 42.5	72.7*	72.0	71.1 51.4	33.2 19.7	19.1 20.2	49.2 28.0	10.8 4.1	612.7 616.9	113.6 165.5	IV								
32.6 32.1	70.4	79.1	67.1 48.1	47.0 27.8	14.5 23.7	38.1 33.9	16.9 5.6	612.4 652.1	117.0 172.3	I-1951	II. Pays industriels de l'Europe occidentale (France, Pays-Bas, Belgique-Luxembourg, Suisse)							
35.2 32.1	73.5	91.5	81.3 96.2	47.7 29.0	25.9 48.8	23.9 50.7	21.4 11.5	663.9 845.0	122.3 206.1	II								
32.2 20.7	63.5	76.3	74.1 101.1	53.1 32.2	25.9 85.6	36.3 67.4	18.9 12.1	602.4 847.8	121.3 256.7	III								
27.9 27.6	33.5	16.8	39.0 33.0	27.4 12.1	17.0 11.3	147.6 147.9	13.2 8.4	882.1 816.2	83.1 253.7	I-1950	III. Europe méditerranéenne et péninsule ibérique (Italie, Grèce, Espagne, Portugal, Turquie et divers pays et territoires euro- péens faisant ou non partie du continent)							
35.2 22.2	33.3	11.3	46.0 38.6	26.1 10.5	14.4 16.3	137.1 169.1	12.7 9.9	889.9 815.3	85.9 232.9	II								
36.4 10.4	32.3*	11.3	44.5 40.3	17.9 10.0	13.2 19.2	181.0 187.2	13.0 11.3	918.7 836.2	120.1 181.1	III								
37.5 30.9	32.2*	12.8	58.9 60.3	23.1 16.1	22.5 16.5	216.9 230.0	15.5 14.1	1 136.2 1 069.7	173.1 263.9	IV								
37.5 37.2	36.4	16.3	65.5 48.2	28.9 16.9	21.9 13.0	209.4 236.5	25.9 17.7	1 257.2 1 122.9	204.6 260.6	I-1951	IV. Pays scandinaves (Danemark, Suède, Norvège, Finlande)							
44.7 50.1	48.8	20.1	83.3 80.9	34.4 23.0	33.0 28.2	111.7 262.3	32.6 23.0	1 262.1 1 280.2	185.5 330.2	II								
46.6 19.8	43.3	17.1	86.7 78.1	29.5 21.2	34.3 41.1	182.6 283.6	25.1 19.9	1 230.1 1 169.9	173.1 294.8	III								
12.2 7.0	11.9	6.3	16.8 11.7	6.8 5.6	3.1 2.5	46.3 40.7	10.3 14.5	279.6 262.0	50.5 152.2	I-1950	V. Allemagne et Autriche							
13.0 10.6	9.1	5.7	11.7 12.7	6.3 5.8	6.5 3.7	29.1 57.8	14.0 19.9	262.1 315.7	52.3 176.5	II								
14.4 8.4	7.7*	4.8	9.7 12.8	4.6 8.5	3.8 3.0	38.0 64.7	10.3 17.3	242.2 309.6	63.4 109.9	III								
19.4 16.6	9.4*	6.4	16.9 17.7	5.1 9.0	5.1 4.6	91.0 71.4	12.4 23.0	362.3 379.1	84.2 137.4	IV								
17.6 12.5	11.4	9.1	21.9 13.6	6.3 8.7	5.0 4.4	90.4 73.8	13.8 21.5	400.7 368.1	85.7 181.0	I-1951	VI. Europe orientale (Tchécoslovaquie, Pologne, Roumanie, Hongrie, Yougoslavie, Bulgarie)							
18.7 9.7	9.8	11.4	22.0 29.9	7.2 7.0	7.7 6.0	47.5 83.8	14.0 22.2	393.2 416.6	74.7 263.2	II								
23.3 10.2	6.7	9.3	16.2 23.8	7.8 14.2	9.7 9.3	61.7 87.5	14.3 19.7	362.9 403.0	61.4 144.7	III								
13.8 14.7	21.9	18.3	15.1 42.7	31.4 14.9	13.0 6.2	75.9 39.4	2.3 3.0	417.2 416.7	40.4 57.0	I-1950	VII. Union des Républiques socialistes soviétiques							
14.3 11.7	31.3	15.2	19.5 48.6	33.6 16.8	13.6 10.6	59.8 48.1	3.3 2.6	454.1 433.4	34.8 62.1	II								
16.5 8.8	38.6*	19.7	24.6 41.3	26.5 15.5	13.6 16.1	99.1 72.0	2.5 3.1	504.0 431.9	37.7 58.2	III								
16.7 19.4	35.3*	33.4	30.1 53.9	38.4 16.7	16.3 10.9	106.4 94.6	4.6 3.7	543.1 551.4	45.8 62.8	IV								
16.8 11.5	29.8	22.6	23.1 40.3	33.8 19.5	10.9 8.6	101.4 96.0	5.3 3.8	560.0 547.3	58.0 65.6	I-1951	VIII. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
16.4 12.0	41.7	27.5	31.0 58.0	39.9 21.5	18.0 16.2	72.1 118.8	4.0 4.5	668.5 657.3	67.9 82.5	II								
17.6 7.0	45.0	25.0	31.4 52.8	32.2 24.1	18.7 27.3	124.8 134.7	6.5 5.5	817.5 650.8	52.3 81.6	III								
20.5 29.8	14.6*	25.9	28.0 32.5	9.7 9.3	3.5 2.8	6.2 18.1	17.2 6.8	325.5 362.1	17.0 141.9	I-1950	IX. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
29.1 10.8	18.7*	21.7	28.3 32.6	8.2 10.1	8.5 5.0	8.5 15.9	16.7 8.7	387.8 326.0	19.5 158.3	II								
34.4 13.6	32.6*	39.4*	38.3 44.6	7.0 18.8	6.9 6.8	11.0 18.0	16.7 13.2	424.0 431.8	30.2 95.4	III								
33.7 46.4	32.6*	43.5	47.4 41.7	9.7 11.9	6.5 6.4	16.6 22.1	23.2 20.2	484.8 564.0	52.6 132.3	IV								
37.7 45.9	30.7	39.1	56.4 39.1	12.8 14.5	6.3 6.0	14.7 27.7	28.5 15.8	520.1 522.1	57.2 145.4	I-1951	X. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
39.3 14.7	38.3	21.7	64.3 38.1	16.1 13.7	19.5 11.0	10.2 29.7	28.6 13.2	626.3 371.2	68.1 162.6	II								
40.4 21.2	40.8	33.6	67.2 56.9	18.2 15.2	23.4 22.2	15.6 30.3	27.4 19.7	655.7 505.6	69.3 139.0	III								
7.2 4.3	12.6	5.4	16.8 13.0	7.3 4.6	11.1 3.5	19.3 25.6	19.3 13.1	187.3 146.7	14.3 13.9	I-1950	XI. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
7.6 5.6	6.2	2.6	14.0 13.2	3.9 4.0	10.2 3.7	17.1 31.9	16.1 12.8	153.9 144.1	15.6 17.4	II								
5.3 3.5	9.5	4.1	18.9 13.8	4.0 2.8	10.9 4.9	23.6 27.1	9.8 11.5	150.8 137.3	13.2 22.4	III								
5.3 5.8	7.8	3.0	18.3 16.3	7.0 2.4	9.0 3.2	32.0 27.6	16.0 18.9	184.3 153.2	16.0 10.9	IV								
4.8 6.9	12.1	5.7	22.4 11.0	4.4 3.5	9.6 4.4	14.7 29.0	17.6 13.8	180.1 154.3	15.7 35.2	I-1951	XII. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
6.4 7.7	9.9	9.2	26.1 22.9	2.2 3.6	15.8 6.8	14.8 22.2	17.6 13.8	176.8 171.1	17.2 48.9	II								
6.5 5.5	10.6	4.5	29.6 24.8	1.7 4.4	17.6 6.9	28.9 28.2	20.4 18.3	180.7 168.2	12.3 15.4	III								
— 0.1	0.8*	—	0.3 3.7	1.7 2.0	1.3 2.4	0.1 —	— —	34.2 31.7	10.3 0.2	I-1950	XIII. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
— —	0.7*	0.1	0.8 4.7	3.2 2.2	0.7 2.6	— —	— —	34.4 28.6	10.1 0.3	II								
— 0.2	0.9*	0.3*	2.4 7.2	2.4 1.1	9.0 8.9	— —	— —	46.3 35.7	13.4 —	III								
— 0.1	1.4*	0.7	2.4 6.3	3.0 2.8	12.8 13.2	— —	— —	59.3 44.0	6.5 0.1	IV								
— —	2.9	—	3.4 5.6	2.6 2.5	8.5 14.6	0.2 —	— —	75.2 36.9	6.3 —	I-1951	XIV. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
— —	1.5	0.1	2.6 5.6	2.1 3.9	11.8 15.7	— —	— —	69.1 38.1	7.0 —	II								
— 0.3	0.4	0.1	4.1 8.4	3.0 2.3	9.1 15.5	0.2 —	— —	73.9 39.0	6.1 —	III								
107.2 114.7	168.8	130.0	163.0 169.0	135.3 66.8	63.7 41.9	318.6 291.7	70.5 47.9	2 642.9 2 486.5	274.1 762.3	I-1950	XV. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
127.0 80.6	160.0	135.3	180.1 193.3	117.1 67.7	67.8 63.9	273.0 342.7	70.4 56.6	2 694.0 2 562.3	287.7 755.6	II								
138.0 63.4	184.9*	152.0	198.9 200.0	93.6 72.7	73.9 88.5	381.0 393.0	59.1 59.2	2 800.8 2 706.8	380.6 604.6	III								
141.0 161.7	191.4*	171.8	245.1 247.6	119.5 78.6	91.3 75.0	512.1 473.7	82.5 84.0	3 382.7 3 378.3	491.8 772.9	IV								
147.0 146.1	193.7	171.9	259.8 206.6	135.8 93.4	76.7 74.7	468.9 496.9	108.0 78.2	3 605.7 3 403.7	544.5 860.1	I-1951	XVI. Total pour l'Eu- rope (y compris l'U.R.S.S.)							
160.7 126.3	223.5	181.5	310.6 331.6	149.6 101.7	131.7 132.7	280.2 567.5	118.2 88.2	3 859.9 3 779.5	542.7 1093.5	II								
166.6 84.7	210.3	165.9	309.3 345.9	145.5 113.6	138.7 207.9	450.1 631.7	112.6 95.2	3 923.2 3 784.3	495.8 932.2	III								

Table XXVII (continued)

IMPORTS AND EXPORTS OF EIGHTEEN EUROPEAN COUNTRIES AND THE UNITED STATES  
ACCORDING TO AREAS OF ORIGIN AND DESTINATION

Millions of dollars at current prices ; imports c.i.f. ; exports f.o.b.

Area of origin for imports and area of destination for exports ↓	Year and quarter	United Kingdom Royaume-Uni		Ireland Irlande		Iceland Islande		France		Netherlands Pays-Bas		Belgium-Luxembourg Belgique-Luxembourg		Switzerland Suisse		Italy Italie		Portugal	
		Imp. <sup>a</sup>	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
IX. United States and dependencies	1950- I	149.4	56.8	14.9	0.6	2.0	0.9	105.9	15.9	65.3	6.6	71.2	31.3	30.8	23.7	108.1*	12.7	8.4	4.0
	II	142.6	61.3	14.6	0.8	1.6	0.6	96.4	20.2	69.7	10.5	80.2	28.6	33.4	23.2	89.9*	12.6	15.1	4.2
	III	122.1	91.7	12.6	1.2	1.9	0.9	81.4	29.6	58.0	21.6	73.3	29.8	35.1	31.5	91.0*	22.6*	12.7	7.2
	IV	178.4	107.7	16.7	1.1	1.9	1.4	94.2	59.6	44.4	22.1	81.5	51.7	46.5	41.1	47.7*	28.9*	6.8	8.1
	1951- I	191.1	93.9	17.0	1.2	1.4	2.1	109.4	67.7	62.1	23.4	98.0	62.2*	51.8	33.3	70.3	26.2	10.3	7.4
	II	246.8	105.2	17.4	1.5	2.1	1.7	127.1	63.9	81.3	32.1	101.3	56.6	64.2	32.9	124.4*	26.8	10.6	8.2
	III	287.4	96.2	15.3	1.6	1.5	1.4	142.1	62.7	78.1	24.5	90.6	48.6	51.6	32.1	145.7	28.4	17.2	9.2
	IV																		
X. Canada and Newfoundland	1950- I	119.9	71.7	2.7	—	—	—	5.1	2.0	1.3	0.7	8.7	3.9	5.1	3.0	1.1	1.2	2.0	0.4
	II	125.2	85.7	4.3	—	0.3	—	8.4	2.7	2.8	1.1	9.6	4.7	5.1	3.7	1.4*	1.3	1.4	0.5
	III	124.7	91.8	4.4	0.1	0.1	—	4.7	3.8	2.8	1.9	16.8	4.4	10.7	4.4	0.8	1.7*	1.3	0.4
	IV	132.3	103.2	5.3	0.1	0.3	0.1	4.4	5.1	1.8	2.0	23.7	8.3	10.1	4.6	3.5*	2.2	1.5	0.6
	1951- I	115.6	79.7	3.9	0.3	0.1	—	6.1	3.9	1.8	1.4	13.6	5.8	8.6	3.7	5.1	2.2	2.1	0.3
	II	168.3	114.4	5.9	0.2	0.1	—	7.6	6.0	3.1	2.1	16.6	11.0	5.4	4.4	3.8	2.8	1.6	0.7
	III	227.1	109.2	6.0	0.1	0.1	—	18.8	7.7	12.6	1.7	20.9	9.7	9.0	4.3	25.4	2.4	1.3	0.5
	IV																		
XI. Latin American republics	1950- I	133.8	98.8	1.7	0.1	0.3	—	64.3	69.0	28.0	7.6	36.9	26.7	17.2	18.2	38.8	38.0	5.8	1.1
	II	193.1	104.5	4.4	0.1	0.1	0.1	58.5	36.5	32.7	9.6	28.6	23.0	21.2	24.1	41.7*	33.9*	1.9	2.3
	III	206.4	101.2	3.5	—	0.3	0.2	53.2	35.0	31.7	17.4	32.2	20.8	25.1	25.8	38.0*	29.0	3.2	2.9
	IV	167.6	121.5	2.4	0.1	—	0.1	71.6	61.2	38.9	19.6	43.7	41.4	37.9	30.1	40.4*	31.7	6.0	4.5
	1951- I	136.0	103.0	2.9	—	0.4	0.4	65.1	60.7	37.2	14.9	45.5	38.0	27.3	26.3	43.7	35.2	3.4	2.0
	II	268.5	113.6	6.5	—	0.5	0.1	84.6	71.4	48.7	28.8	44.5	46.2	34.3	32.9	66.0*	33.4*	6.0	3.0
	III	350.9	118.2	3.9	0.1	0.4	0.3	86.3	71.9	49.2	27.4	27.5	43.5	20.7	32.2	49.6	32.3	7.5	4.5
	IV																		
XII. Overseas sterling area (including British colonies)	1950- I	619.6	610.0	7.1	0.2	—	—	112.2	17.1	36.6	14.7	39.3	15.9	12.6	6.8	30.7*	22.2*	1.7	0.8
	II	640.4	604.9	7.8	0.2	—	—	102.3	23.0	50.8	17.9	41.3	17.2	5.6	6.3	39.2*	31.1*	1.7	1.0
	III	592.8	640.8	6.5	0.6	—	—	107.5	22.7	44.8	20.1	31.8	11.3	18.3	6.4	48.8*	46.5*	1.0	1.0
	IV	678.2	716.0	10.1	0.6	—	0.1	145.8	38.5	50.1	27.7	60.8	27.1	21.1	13.8	62.1*	55.3*	2.2	1.4
	1951- I	936.2	685.0	15.4	0.5	—	0.2	217.8	41.9	49.1	27.8	72.4	38.3	17.2	16.1	86.8	55.8	2.8	1.3
	II	947.4	782.0	17.3	0.6	0.1	0.1	286.5	45.9	56.8	36.0	67.9	48.4	20.0	22.5	116.9*	66.7	3.5	1.7
	III	913.4	862.5	5.4	0.7	0.1	—	228.3	45.6	69.1	37.4	51.1	57.6	7.5	18.0	79.8	66.8	1.7	3.1
	IV																		
XIII. Dependent overseas territories (excluding British colonies)	1950- I	83.2	31.2	2.3	0.1	0.5	—	192.5	255.2	41.1	28.2	40.2	27.6	5.8	4.1	13.3*	4.7*	16.1	10.8
	II	86.3	28.8	3.5	—	0.5	—	218.3	266.5	47.7	29.7	43.5	23.7	8.6	5.8	13.9*	6.1*	14.1	12.7
	III	64.4	31.0	1.7	—	1.7	—	186.7	237.8	53.6	28.3	42.8	15.1	8.9	6.0	12.9*	5.7*	10.7	14.2
	IV	76.2	32.4	3.0	—	2.1	—	238.7	358.2	61.4	36.2	60.8	29.5	9.5	8.3	13.7*	11.0*	15.2	16.7
	1951- I	105.0	31.4	3.2	0.1	0.5	—	236.7	341.6	84.1	38.5	71.3	34.0	12.5	7.0	20.4	8.2	13.6	14.9
	II	141.2	41.1	3.2	—	1.2	—	290.0	382.1	82.4	41.4	68.3	40.2	14.2	8.0	22.1	11.5	12.2	19.4
	III	127.7	41.9	3.0	—	1.5	—	248.6	397.4	55.1	42.7	60.6	47.2	9.3	9.8	21.3	17.7	10.2	19.6
	IV																		
XIV. Other overseas countries	1950- I	96.6	84.7	1.0	0.2	—	0.1	52.4	23.5	10.2*	6.1*	11.7	17.1	10.9	10.2	31.1*	15.6*	2.2	0.2
	II	128.2	76.6	3.5	0.4	—	0.2	57.3	28.0	20.3*	8.0*	12.9	16.2	10.7	10.0	20.8*	20.5*	2.6	0.3
	III	85.0	94.0	2.5	0.2	—	0.1	38.4	24.0	20.8*	7.8*	13.3	15.1	20.3	12.4	28.0*	22.1*	2.8	0.5
	IV	111.9	96.4	2.3	0.3	—	0.2	41.5	37.4	23.8*	12.1*	18.9	27.4	27.8	18.8	43.5*	21.3	2.9	0.5
	1951- I	170.3	92.1	2.8	0.2	0.1	0.2	79.3	45.7	30.6*	10.8*	29.7	35.7	26.5	15.3	46.7	19.7	4.1	1.1
	II	167.5	110.7	2.5	0.2	0.1	0.9	92.0	50.2	38.0*	15.2*	23.1	30.2	17.8	17.6	58.1*	22.6	4.7	0.4
	III	171.8	91.7	3.3	0.3	0.2	—	66.4	40.9	28.1	13.4	16.4	21.8	10.8	15.5	46.3	20.1	4.8	0.5
	IV																		
XV. Total overseas countries	1950- I	1 202.5	953.2	29.7	1.2	2.8	1.0	532.4	382.7	182.5*	63.9*	208.0	122.5	82.4	66.0	223.1*	94.4*	36.2	17.3
	II	1 315.8	961.8	38.1	1.5	2.5	0.9	541.2	376.9	224.0*	76.8*	216.1	113.4	84.6	73.1	206.9*	105.5*	36.8	21.0
	III	1 195.4	1 050.5	31.2	2.1	4.0	1.2	471.9	352.9	211.7*	97.1*	210.2	96.5	118.4	86.5	219.5*	127.6*	31.7	26.2
	IV	1 344.6	1 177.2	39.8	2.2	4.3	1.9	596.2	560.0	220.4*	119.7*	289.4	185.4	152.9	116.7	210.9*	150.4*	34.6	31.8
	1951- I	1 654.2	1 085.1	45.2	2.3	2.5	2.9	714.4	561.5	264.9*	116.8*	330.5	214.0*	143.9	101.7	273.0	147.3	36.3	27.0
	II	1 939.7	1 267.0	52.8	2.5	4.1	2.8	887.8	619.5	310.3*	155.6*	321.7	232.6	155.9	118.3	391.3*	163.8*	38.6	33.4
	III	2 078.3	1 319.7	36.9	2.8	3.8	1.7	790.5	626.2	292.2	147.1	267.1	228.4	108.9	111.9	368.1	167.7	42.7	37.4
	IV																		
XVI. TOTAL WORLD	1950- I	1 681.1	1 433.6	104.0	40.0	8.0	7.6	793.9	673.7	452.7*	291.0*	434.7	400.9	202.5	185.1	373.8*	259.7*	64.7	35.1
	II	1 852.8	1 413.2	109.7	42.0	8.9	4.3	773.6	696.9	528.3*	306.9*	451.7	381.4	211.3	195.7	353.1*	276.4*	75.2	36.3
	III	1 752.3	1 510.6	101.7	52.0	9.0	5.1	654.4	684.0	504.5*	351.4*	448.5	324.4	287.7	231.7	344.2*	297.9*	63.1	48.5
	IV	1 940.2	1 677.4	125.6	63.6	10.4	12.0	845.3	1 004.4	566.6*	433.2*	614.6	524.7	349.6	293.7	370.2*	358.5*	70.4	64.0
	1951- I	2 361.3	1 612.7	132.3	44.3	9.1	9.3	983.1	1 018.7	641.1*	430.7*	664.7*	611.3*	355.8	246.2	463.1	364.7	70.2	56.6
	II	2 785.6	1 837.3	162.9	44.9	18.1	8.3	1 214.2	1 083.6	717.4*	463.7*	654.1	671.8	372.4	274.4	582.6*	397.9*	80.3	63.6
	III	2 964.6	1 826.3	120.4	54.5	11.5	11.2	1 148.4	997.7	635.8	482.0	558.6	660.5	307.9	270.0	545.7	415.3	85.7	64.8
	IV																		

<sup>a</sup> General imports.

<sup>b</sup> Excluding exports for war reparations.

<sup>c</sup> Imports f.o.b.

<sup>d</sup> Exports excluding special categories.

Table XXVII (suite)

IMPORTATIONS ET EXPORTATIONS DE DIX-HUIT PAYS EUROPÉENS ET DES ÉTATS-UNIS, PAR RÉGIONS D'ORIGINE ET DE DESTINATION

En millions de dollars aux prix courants ; importations c.a.f. ; exportations f.o.b.

Greece, Spain and Turkey Grèce, Espagne et Turquie	Denmark Danemark	Sweden Suède	Norway Norvège	Finland Finlande	Western Germany Allemagne occid.	Austria Autriche	Total of eighteen countries Total pour dix-huit pays	United States Etats-Unis	Année et trimestre	Région d'origine pour les importations et région de destination pour les exportations
Imp. Exp.	Imp. Exp.	Imp. Exp.	Imp. Exp.	Imp. Exp. <sup>b</sup>	Imp. Exp.	Imp. Exp.	Imp. Exp.	Imp. c Exp. d		
72.9 19.5	25.6 2.3	23.8 13.8	20.1 9.7	4.7 7.0	119.5* 12.4	34.4 2.9	857.0 220.1	/	I-1950	IX. Etats-Unis et territoires dépendants
80.2 36.4	17.6 2.2	28.1 14.8	23.3 7.1	6.3 8.6	91.3 13.9	25.5 2.3	815.8 247.3		II	
53.6 26.1	16.8* 3.3	23.2 15.5	20.7 11.0	5.6 8.4	101.9 27.7	22.6 6.3	732.5 334.4		III	
54.5 38.8	18.9* 4.5	28.6 22.5	18.3 10.6	6.2 9.4	118.2 49.0	16.8 5.5	779.6 462.0		IV	
55.2 49.3	18.6 4.1	31.5 19.3	19.9 13.2	4.1 10.1	131.0 48.6	30.5 6.2	902.2 468.2		I-1951	
71.3 33.9	34.2 4.3	50.1 36.2	32.0 12.5	9.2 19.9	168.6 61.6	45.9 5.9	1 186.5 503.2		II	
46.6 28.6	20.6 4.4	41.3 18.8	27.1 8.7	9.5 13.7	159.0 67.8	38.8 7.2	1 172.4 453.9		III	
1.9 0.8	0.3 0.2	0.4 0.8	2.2 0.2	0.3 0.1	2.8 1.1	0.6 0.2	154.4 86.3	400.5 377.9	I-1950	X. Canada et Terre-Neuve
4.6 1.1	0.1 0.2	1.3 1.1	2.6 0.4	— —	1.4 2.2	0.6 0.1	169.1 104.8	477.0 509.1	II	
1.1 0.9	0.1 0.3	0.9 1.2	3.9 0.4	— —	1.8 3.0	0.9 0.2	175.0 114.5	505.2 493.8	III	
0.9 2.4	0.1* 0.5	1.2 1.7	3.6 0.3	0.1 0.1	4.1 3.4	0.9 0.7	193.8 135.3	571.8 566.8	IV	
0.6 3.1	0.3 0.3	1.0 1.5	5.6 0.3	— —	3.4 4.0	0.5 0.6	168.3 107.1	527.4 598.5	I-1951	
1.0 2.6	0.1 0.8	1.5 2.3	6.7 0.5	0.7 0.1	8.3 7.5	0.4 0.8	231.1 156.2	582.1 736.0	II	
1.6 1.8	0.1 0.4	2.2 1.7	8.0 1.4	1.2 —	13.6 8.2	0.4 0.2	348.3 149.3	552.3 606.1	III	
9.0 7.8	3.5 3.3	19.5 21.3	4.6 3.8	9.0 3.1	26.2 19.5	3.3 3.2	401.9 321.5	675.4 577.7	I-1950	XI. Républiques de l'Amérique latine
18.8 8.3	4.2 4.0	27.5 21.8	8.1 6.2	9.7 4.7	48.8 25.2	5.9 3.8	505.2 308.1	588.2 617.2	II	
19.3 11.5	5.9* 4.7	27.1 27.3	7.2 6.0	7.0 7.0	44.4 37.4	6.1 3.6	510.6 329.8	841.1 665.2	III	
11.7 14.4	10.9 6.4	24.0 33.1	11.0 7.3	9.7 4.5	65.6 71.5	7.1 6.0	548.5 453.4	757.4 761.1	IV	
9.0 10.4	8.6 4.8	28.3 29.7	5.6 9.5	9.1 6.7	58.7 69.4	2.7 5.2	483.5 416.2	979.9 827.5	I-1951	
11.1 10.9	11.9 6.4	38.7 56.2	10.8 14.1	11.2 13.7	97.2 92.3	3.7 5.0	744.2 528.0	820.1 923.1	II	
15.8 9.1	6.4 9.5	37.7 48.2	8.6 14.1	21.7 18.3	100.5 108.1	5.6 6.7	792.3 544.4	702.0 941.7	III	
4.9 3.4	3.3 1.9	14.2 13.1	8.1 6.2	1.9 1.8	65.6 16.8	3.4 1.3	961.2 732.2	265.5 181.3	I-1950	XII. Zone sterling d'outre-mer (y compris les colonies britanniques)
11.8 2.8	4.3 2.8	17.4 17.1	7.9 5.0	2.8 3.0	67.6 18.7	4.2 2.4	1 005.1 753.4	285.0 188.9	II	
14.4 1.8	3.3* 3.3	21.2 17.5	5.3 5.5	6.2 4.4	66.5 27.2	2.5 2.3	970.9 811.4	310.2 151.7	III	
12.7 5.5	2.9* 4.1	20.1 21.6	6.2 7.7	2.8 4.4	116.3 49.7	1.6 2.8	1 193.0 976.3	376.3 181.5	IV	
10.6 3.4	5.3 4.4	34.5 22.0	10.0 9.9	5.0 4.4	131.5 51.7	2.0 2.6	1 596.6 965.3	454.2 218.0	I-1951	
15.5 3.3	3.8 5.5	43.3 31.7	11.6 12.2	11.8 6.3	119.6 65.4	1.0 4.0	1 723.0 1 132.3	475.3 288.2	II	
13.0 3.6	3.1 6.1	33.1 33.9	9.2 13.9	9.6 12.3	127.4 87.4	2.2 4.4	1 554.0 1 253.3	405.8 316.2	III	
29.5 23.9	3.3 1.9	10.4 3.1	7.2 0.5	1.5 0.5	40.1 4.2	0.8 0.4	487.8 396.4	87.7 80.7	I-1950	XIII. Territoires d'outre-mer dépendant de pays européens (à l'exclusion des colonies britanniques)
30.7 28.1	1.7* 2.8	14.4 3.3	8.5 0.4	2.5 0.6	33.5 5.0	1.0 0.4	528.7 413.9	96.3 73.5	II	
34.6 23.8	2.0* 2.9*	13.1 4.2	7.4 0.6	2.2 0.9	52.5 8.1	0.4 0.5	495.6 379.1	107.5 71.7	III	
22.8 21.7	1.6 2.6	16.4 4.2	4.9 0.7	1.9 0.8	61.8 12.8	0.6 0.7	590.6 535.8	153.4 79.7	IV	
20.4 21.5	1.0 3.1	18.7 4.2	7.2 0.7	3.3 0.6	49.9 13.4	1.6 0.6	649.4 519.8	170.2 98.3	I-1951	
26.2 27.7	1.4 4.5	22.0 5.4	9.4 1.3	3.8 1.0	46.7 19.5	0.7 0.6	745.0 603.7	139.9 116.2	II	
19.6 22.3	3.6 4.4	20.7 6.3	7.1 1.5	4.3 1.8	40.4 27.4	0.3 1.3	633.3 641.3	141.8 132.6	III	
21.4 10.3	5.5 2.9	13.3 8.0	6.5 4.2	3.0 2.6	19.6 10.9	1.9 2.2	287.3 198.8	167.2 261.2	I-1950	XIV. Autres pays extra-européens
29.3 12.1	4.7 2.4	14.6 8.9	7.9 2.4	2.3 3.1	12.8 14.2	1.9 3.4	329.8 206.7	172.4 249.8	II	
23.8 12.7	4.4 3.5	15.0 9.0	7.0 3.4	2.8 4.2	21.8 19.1	1.1 2.7	287.0 230.8	199.0 250.3	III	
25.2 22.0	7.1 4.0	16.4 8.3	6.5 4.1	2.4 5.6	35.2 26.7	2.9 3.1	368.3 288.2	263.5 275.6	IV	
23.0 16.4	9.2 3.8	19.8 8.6	8.2 3.4	2.5 4.4	41.6 24.5	3.0 3.5	497.4 285.4	281.1 344.3	I-1951	
28.7 12.7	4.2 3.4	19.9 12.5	7.5 6.1	2.9 6.8	40.8 31.0	1.7 5.2	509.5 325.7	260.0 374.0	II	
23.1 11.2	4.0 2.6	13.5 11.4	7.6 4.9	3.7 8.4	55.3 30.7	1.2 4.2	456.5 277.6	193.5 342.0	III	
139.6 65.7	41.5 12.5	81.6 60.1	48.7 24.6	20.4 15.1	273.8* 64.9	44.4 10.2	3 149.6 1 955.3	1 596.3 1 478.8	I-1950	XV. Total pour les pays extra-européens
175.4 88.8	32.6* 14.4	103.3 67.0	58.3 21.5	23.6 20.0	253.4 79.2	39.1 12.4	3 353.7 2 034.2	1 618.9 1 638.5	II	
146.8 76.8	32.5* 18.0*	100.5 74.7	51.5 26.9	23.8 24.9	288.9 122.5	33.6 15.6	3 171.6 2 200.0	1 963.0 1 632.7	III	
127.8 104.8	41.5* 22.1	106.7 91.4	50.5 30.7	23.1 24.8	401.2 213.1	29.9 18.8	3 673.8 2 851.0	2 122.4 1 864.7	IV	
118.8 104.1	43.0 20.5	133.8 85.3	56.5 37.0	24.0 26.2	416.1 211.6	40.3 18.7	4 297.4 2 762.0	2 412.8 2 086.6	I-1951	
153.8 91.1	55.6 24.9	175.5 144.3	78.0 46.7	39.6 47.8	481.2 277.3	53.4 21.5	5 139.3 3 249.1	2 277.4 2 437.5	II	
119.7 76.6	37.8 27.4	148.5 120.3	67.6 44.5	50.0 54.5	496.2 329.6	48.5 24.0	4 956.8 3 319.8	1 995.4 2 338.6	III	
246.8 180.4	210.3 142.5	244.6 229.1	184.0 91.4	84.1 57.0	592.4* 356.6	114.9 58.1	5 792.5 4 441.8	1 870.4 2 241.1	I-1950	XVI. TOTAL POUR LE MONDE ENTIER
302.4 169.4	192.6* 149.7	283.4 260.3	175.4 89.2	91.4 83.9	528.4 421.9	109.5 69.0	6 047.7 4 596.5	1 906.6 2 394.1	II	
284.8 140.2	217.4* 170.0*	299.4 274.7	145.1 99.6	97.7 113.4	669.9 515.5	92.7 74.8	5 972.4 4 906.8	2 343.6 2 237.3	III	
268.8 266.5	232.9* 193.9	351.8 339.0	170.0 109.3	114.4 99.8	913.3 686.8	112.4 102.8	7 056.5 6 229.3	2 614.2 2 637.6	IV	
265.8 250.2	236.7 192.4	393.6 291.9	192.3 130.4	100.7 100.9	885.0 708.5	148.3 96.9	7 903.1 6 165.7	2 957.3 2 946.7	I-1951	
314.5 217.4	279.1 206.4	486.1 475.9	227.6 148.4	171.3 180.5	761.4 844.8	171.6 109.7	8 999.2 7 028.6	2 820.1 3 531.0	II	
286.3 161.3	248.1 193.3	457.8 466.2	213.1 158.1	188.7 262.4	946.3 961.3	161.1 119.2	8 880.0 7 104.1	2 491.2 3 270.8	III	

a Importations générales. b Livraisons au titre des réparations de guerre exclues. c Importations f.o.b. d Les catégories spéciales ne sont pas comprises dans les exportations.

Table XXVIII

Thousands of tons

NOTE. — Data cover imports from all sources and exports to all destinations, both European and non-European, by the countries listed in footnote (b) below. Except as there indicated, trade of eastern European countries is not included because of the lack of data on a sufficiently regular and detailed basis. Figures for 1938 are shown both for Europe as a whole (including the U.S.S.R. and the Baltic States) and, to provide comparability, for the countries covered by the post-war figures.

Commodity group <sup>a</sup>		NINETEEN EUROPEAN COUNTRIES <sup>b</sup>									
		TOTAL EUROPE	1938		1949		1950		1951		Third quarter <sup>c</sup>
	Quarterly average	Quarterly average	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	
<i>Bread grain</i>											
European imports	3,381	3,337	4,764	4,216	3,879	2,888	3,301	3,130	3,163	3,111	4,721*
of which											
United Kingdom		1,413	1,636	1,408	1,293	813	1,142	793	1,110	851	1,486
Germany <sup>b</sup>		349	492	411	1,331	569	574	474	560	520	586
Italy		85	82	385	1,116	299	274	276	251	253	470
Belgium-Luxembourg		311	196	327	99	116	173	261	186	302	303
European exports	1,125	273	117	49	199	372	348	377	281	453	333
<i>Coarse grain</i>											
European imports	3,060	3,054	1,990	1,704	2,299	2,661	2,192	1,472	1,671	2,325	2,157*
of which											
United Kingdom		1,038	269	146	321	537	819	387	184	754	740
Germany <sup>b</sup>		640	538	484	681	429	88	189	339	359	381
Belgium-Luxembourg		284	163	196	271	319	219	147	239	219	185
France <sup>b</sup>		199	295	114	197	372	223	110	114	177	140
European exports	582	127	47	29	65	106	81	60	94	65*	78
<i>Sugar (raw equivalent)</i>											
European imports	1,166	1,155	1,145	1,259	1,114	845	1,355	1,610	1,359	964	1,598*
of which											
United Kingdom		761	776	737	644	492	670	820	749	504	965
Germany <sup>b</sup>		4	30	104	116	42	126	174	174	111	236
Netherlands		50	58	121	28	22	133	107	26	50	157
France <sup>b</sup>		80	55	40	116	96	121	56	67	54	49
European exports	363	332	323	266	643	462	383	470	706	694	407
of which United Kingdom		115	135	140	215	182	161	266	235	228	213
<i>Meat</i>											
European imports	530	530	350	424	416	485	420	407	363	340	338*
of which United Kingdom		421	283	335	326	402	340	310	219	214	218
European exports	201	138	66	82	130	118	124*	156*	172*	164	164
of which											
Denmark		62	29	35	68	61	64*	83*	76*	97	95
Ireland		49	22	28	38	29	22	36	61	27	20
<i>Butter</i>											
European imports	144	144	110	93	85	139	117	102	86	125	108
of which United Kingdom		119	97	76	56	103	104	77	56	95	89
European exports	88	71	54	64	49	47	60	76	62	48	63
of which											
Denmark		39	40	41	33	30	47	44	35	30	46
Netherlands		13	12	22	13	11	10	23	20	13	10
<i>Cheese</i>											
European imports	58	58	88	93	45	67	69	78	56	93	52*
of which United Kingdom		37	69	68	23	41	40	47	28	71	28
European exports	37	36	35	42	37	41	41	49	48	40	42
of which											
Netherlands		15	14	20	14	13	15	21	21	15	17
Denmark		2	9	8	8	8	10	12	9	8	10
Italy		6	3	4	4	5	4	4	4	4	3
Switzerland		6	3	4	4	4	4	4	4	4	3
<i>Eggs</i>											
	102	102	61	59	69	90	129	90	72	83	103*
			</								



<i>Eggs</i>	European imports of which United Kingdom	102	102	65	61	59	46	50	90	47	129	90	72	83	103*	72
	European exports of which Denmark	84	60	24	45	32	17	37	62	29	69	46	50	60	54	40
	Ireland Netherlands		5	22	6	6	11		6	12	18	14	19	3	21	16
<i>Fish</i>	European imports of which Germany <sup>b</sup>	249	218	57	69	53	54	244	220	59	145	128	192	256	147*	133
	United Kingdom		47	54	47	54	33	54	49	32	24	25	15	61	18	13
	Italy		19	15	20	18	16	263	256	25	12	13	27	24	18	16
	European exports of which Norway	240	234	65	248	148	30	57	256	110	138	130	229	291	179	166
	Iceland		24	56	42	47	13	38	33	16	22	24	41	41	69	51
	Denmark		14	33	24	37	24	47	35	22	13	16	38	37	24	26
<i>Oil seeds</i>	European imports of which United Kingdom	1,814	1,790	414	961	781	821	821	766	275	312	355	924	1,137	883*	1,104
	France <sup>b</sup>		337	103	316	360	334	334	86	166	105	108	165	249	215	336
	Germany <sup>b</sup>		462	56	139	125	103	103	71	37	37	108	132	135	257	188
	European exports of which Turkey	64	17	2	22	17	15	10	46	23	26	31	27	34	38*	15
	Netherlands		70	183	38	28	77	77	18	6	18	23	15	13	17	10
<i>Animal and vegetable fats and oils</i>	European imports of which United Kingdom	427	413	102	464	383	479	479	499	125	638	536	586	542	638	628
	France <sup>b</sup>		100	44	99	167	188	188	133	111	306	160	147	135	267	225
	Germany <sup>b</sup>		22	22	25	51	72	72	47	28	47	38	48	40	96	138
	European exports of which Norway	249	237	27	117	93	136	136	124	24	34	56	30	145	149	185
	Netherlands		74	74	19	24	24	24	37	25	25	15	16	33	40	39
	Belgium-Luxembourg		12	12	16	11	14	14	18	18	13	13	16	26	19	43
<i>Coffee</i>	European imports of which France <sup>b</sup>	188	185	47	107	112	125	125	114	33	115	120	128	124	132	110
	Belgium-Luxembourg		13	13	22	24	27	27	33	35	35	39	42	39	39	34
	Italy		9	9	19	26	24	24	17	10	10	15	17	15	13	9
<i>Tea</i>	European imports of which United Kingdom	66	62	52	40	50	86	86	55	48	26	46	67	72	49	37
	France <sup>b</sup>		4	4	35	44	77	77	7	7	20	37	57	61	42	34
	Netherlands		29	29	10	17	17	17	37	18	6	6	17	38	10	4
<i>Tobacco</i>	European imports of which United Kingdom	92	88	34	59	85	108	108	62	23	59	88	118	67	63	94
	France <sup>b</sup>		23	9	10	38	55	55	8	8	10	34	56	15	14	39
	Netherlands		7	7	13	14	14	14	2	2	4	7	7	10	11	11
	European exports of which Turkey	41	29	10	34	12	36	36	37	6	21	14	34	38	24*	18
	Greece		11	11	17	3	7	7	18	8	5	1	9	11	10	4
	Netherlands		11	11	17	3	7	7	18	8	5	1	9	11	10	4

<sup>a</sup> For the composition of the commodity groups and information on conversion factors employed, see ECONOMIC SURVEY OF EUROPE IN 1949, Appendix B, page 260.

<sup>b</sup> The countries whose trade is included throughout the table are: United Kingdom, Iceland, Ireland, France, the Netherlands, Belgium-Luxembourg, Switzerland, Italy, Greece, Spain, Portugal, Turkey, Denmark, Sweden, Norway, Finland, Germany, Austria and estimates for Czechoslovakia. In addition, Polish imports and exports are included in bread grain and sugar. The coverage for Sweden is incomplete, the published monthly trade returns giving only the most important items in each commodity group, which, however, make up 90 per cent of the total value of the trade in 1948.

<sup>c</sup> Provisional.

Table XXIX - IMPORTS AND EXPORTS OF SELECTED INDUSTRIAL MATERIALS  
Thousands of tons

NOTE. - Data cover imports from all sources and exports to all destinations, both European and non-European, by the countries listed in footnote b below. Except as there indicated, trade of eastern European countries is not included because of the lack of data on a sufficiently regular and detailed basis. Figures for 1938 are shown both for Europe as a whole (including the U.S.S.R. and the Baltic States) and, to provide comparability, for the countries covered by the post-war figures.

Commodity group <sup>a</sup>	TOTAL EUROPE	NINETEEN EUROPEAN COUNTRIES <sup>b</sup>							
		1938	Quarterly average	1949	1950	1951	First quarter	Second quarter	Third quarter <sup>c</sup>
<b>Coal, coke and patent fuel</b>									
European imports	21,560	21,559	20,126	18,620	18,340	22,191	19,896	20,893	21,447
of which									
France <sup>b</sup>		5,525	5,091	4,212	3,769	3,461	2,462	2,093	2,513
Italy		3,041	2,963	2,508	1,365	2,471	1,830	2,111	1,942
Austria		575	1,466	1,600	1,600	1,648	1,310	1,444	1,395
Sweden		1,933	1,225	1,124	1,821	1,941	1,381	1,874	1,993
European exports <sup>d</sup>	25,833	25,833	21,159	20,789	22,137	22,990	20,980	22,445	22,200
of which									
Poland		2,987	8,593	7,591	7,651	7,833	7,503	7,730	7,653
Germany <sup>b</sup>		8,202	5,962	5,668	5,542	6,099	5,608	7,244	6,775
United Kingdom		9,699	3,691	4,373	5,418	5,416	4,386	3,886	3,604
<b>Mineral oil, crude and refined <sup>e</sup></b>									
European imports	9,825	9,726	14,345	14,154	14,829	14,814	17,107	18,610	18,907
of which									
United Kingdom		3,179	4,716	4,517	4,330	4,677	5,337	5,007	5,146
France <sup>b</sup>		2,071	3,248	3,083	3,197	3,275	3,609	3,517	4,244
Netherlands		461	1,058	943	1,070	1,174	1,451	1,835	1,809
Italy		691	800	962	1,014	1,049	1,417	1,670	1,934
Germany <sup>b</sup>		1,347	642	656	592	383	723	810	937
European exports	2,130	1,764	1,884	2,082	2,250	2,324	2,945	4,131	3,608
of which									
France <sup>b</sup>		147	651	693	742	618	811	1,136	1,064
Netherlands		20	301	416	436	495	797	1,352	979
<b>Steel, crude and finished</b>									
European imports	1,243	1,074	1,370	1,362	1,103	1,234	1,391	1,287	1,403
of which									
United Kingdom		208	309	273	138	135	146	118	68
Netherlands		199	244	241	203	297	281	276	293
European exports	1,999	1,884	2,194	2,120	2,360	2,541	2,775	2,493	4,173
of which									
Belgium-Luxembourg		550	993	864	717	808	783	688	1,091
France <sup>b</sup>		289	411	471	755	657	742	541	1,091
United Kingdom		325	462	453	520	572	623	625	1,400
Germany <sup>b</sup>		534	123	173	149	311	405	441	633
<b>Copper</b>									
European imports	339	326	239	225	190	214	251	202	234
of which									
United Kingdom		90	86	98	61	71	93	81	78
France <sup>b</sup>		38	37	40	36	41	24	15	31
Belgium-Luxembourg		57	50	33	42	39	53	38	44
European exports	55	47	57	68	53	57	68	66	67
of which Belgium-Luxembourg		30	37	42	25	32	34	30	32
<b>Timber (thousand m<sup>3</sup>)</b>									
European imports	8,431	8,122	4,655	7,330	6,599	3,563	4,639	7,634	6,014
of which									
United Kingdom		3,373	1,599	3,230	2,821	1,278	1,387	2,781	2,203
France <sup>b</sup>		668	961	968	659	329	205	283	242
Netherlands		488	448	859	685	431	600	1,101	734
European exports <sup>f</sup>	7,188	4,963	3,695	5,667	4,425	2,854	4,580	6,452	5,094
of which									
Finland <sup>b</sup>		1,704	772	2,314	1,665	302	1,456	3,020	1,679
Sweden		1,030	653	1,432	1,181	526	913	1,272	1,201
<b>Wood-pulp</b>									
European imports	752	737	689	723	740	730	873	774	783 <sup>g</sup>
of which									
United Kingdom		431	354	376	331	302	420	379	353 <sup>g</sup>
France <sup>b</sup>		93	103	82	118	119	162	102	123
Italy		67	33	49	47	92	54	49	53
European exports	1,296	1,257	829	818	1,141	874	1,113	944	1,030
of which									
Sweden <sup>b</sup>		573	470	493	620	508	404	273	272
Netherlands		105	104	104	124	149	111	218	240
European imports	169	159	87	92	107	82	71	82	91
European exports	96 <sup>g</sup>	68	96 <sup>g</sup>	96 <sup>g</sup>	84	68	96 <sup>g</sup>	96 <sup>g</sup>	84

	1,296	1,257	829	818	1,141	874	1,113	944	1,030	824	1,236	952
European exports . . . . .		573	829	818	1,141	874	1,113	944	1,030	824	1,236	952
of which Sweden <i>b</i> . . . . .		405	221	403	256	239	408	604	483	372	482	436
Finland . . . . .		155	102	102	156	129	239	272	244	233	342	309
Norway . . . . .		155	106	102	156	129	239	272	244	233	342	309
European imports . . . . .	169	113	87	92	107	82	71	82	91	68	96*	84
of which United Kingdom . . . . .		405	221	403	256	239	408	604	483	372	482	436
European exports . . . . .	249	90	205	214	215	233	244	225	243	210	244	224
of which Finland . . . . .		41	51	88	95	97	99	93	90	80	108	99
Sweden <i>b</i> . . . . .		38	37	38	44	51	51	46	55	43	59	47
Norway . . . . .		38	37	38	44	51	51	46	55	43	59	47
Raw wool												
European imports . . . . .	255		248	232	197	244	259	195	191	230	174	130
of which United Kingdom . . . . .		77	93	79	77	82	95	57	58	89	52	40
France <i>b</i> . . . . .		60	51	58	30	47	44	38	32	41	44	33
Belgium-Luxembourg . . . . .		29	27	27	26	33	36	24	30	27	18	14
Raw cotton												
European imports . . . . .	506		481	362	387	504	473	424	417	455	421	398
of which United Kingdom . . . . .		139	164	114	76	123	141	119	117	118	107	143
France <i>b</i> . . . . .		73	85	54	63	103	73	66	60	61	69	54
Germany <i>b</i> . . . . .		88	45	40	61	69	63	56	65	75	56	38
Belgium-Luxembourg . . . . .		34	24	22	29	37	32	22	36	38	20	17
Wool yarn												
European imports . . . . .	9.8		6.5	7.6	10.5	12.4	10.8	11.3	13.4	11.9	9.0*	5.4
of which Netherlands . . . . .		1.8	2.4	1.9	2.5	3.4	3.3	2.6	3.0	2.8	2.1	0.9
European exports . . . . .	10.2		10.6	11.3	13.3	15.1	14.7	14.1	18.3	15.7	13.0	8.3
of which United Kingdom . . . . .		0.3	3.1	3.1	3.4	3.9	3.9	4.0	4.2	4.1	3.3	2.3
France <i>b</i> . . . . .		1.9	3.5	3.6	4.5	5.3	5.0	4.5	6.7	5.8	4.8	2.6
Belgium-Luxembourg . . . . .			2.1	2.9	3.4	3.9	3.1	2.2	3.0	2.6	2.5	1.4
Cotton yarn												
European imports . . . . .	25.0		11.2	13.8	17.6	22.9	18.1	17.9	18.8	20.4	22.8	23.3
of which Germany <i>b</i> . . . . .		5.4	1.8	5.0	3.5	4.6	2.4	1.2	1.6	2.3	1.9	3.1
European exports . . . . .	34.4		29.5	26.3	27.6	27.0	24.1	21.1	24.7	24.7	28.2	28.6
of which United Kingdom . . . . .		13.9	9.9	8.5	8.2	8.0	7.7	7.7	8.9	8.9	8.2	6.8
Italy . . . . .		4.8	10.7	6.6	9.2	9.2	7.5	6.1	5.5	5.9	9.6	8.8
Belgium-Luxembourg . . . . .		3.1	5.8	7.5	5.6	5.5	4.8	3.0	4.8	4.6	5.6	7.1
Artificial yarn and fibres												
European imports . . . . .	10.9		11.3	9.5	10.1	12.5	12.1	14.8	16.0	18.2	18.6	17.2
of which Germany <i>b</i> . . . . .		3.7	2.7	2.4	2.3	3.6	2.8	3.4	4.6	5.2	4.1	5.4
United Kingdom . . . . .		—	1.9	0.7	0.3	1.2	0.8	1.0	0.9	1.5	3.4	2.5
European exports . . . . .	20.4		25.5	24.0	32.6	33.6	44.8	48.2	60.1	59.8	61.3	51.8
of which Italy . . . . .		9.8	4.0	5.3	10.0	5.0	8.6	12.5	15.6	13.4	15.2	11.2
United Kingdom . . . . .		3.1	4.7	3.6	5.4	6.6	6.8	7.3	8.0	6.7	5.5	5.3
Netherlands . . . . .		1.6	4.6	3.7	4.8	4.7	5.2	4.8	6.0	5.0	4.5	4.9
Cotton tissue												
European imports <i>g</i> . . . . .	..		18.1	19.0	18.3	21.9	23.9	25.1	25.7	27.2	25.0	22.0
European exports <i>g</i> . . . . .	..		60.3	59.6	57.7	61.6	56.2	57.2	73.1	66.3	68.3	67.8
of which United Kingdom . . . . .		39.8	26.8	25.8	23.7	31.1	21.0	22.7	26.6	24.3	28.3	24.6
France <i>b</i> . . . . .		6.8	13.2	12.4	12.8	15.3	13.4	12.3	16.9	14.2	17.7	14.8
Netherlands . . . . .		5.3	4.0	4.1	3.8	4.3	3.5	3.5	5.0	4.8	5.0	4.8
Belgium-Luxembourg . . . . .		4.7	5.3	6.3	4.7	7.1	6.1	5.0	7.6	7.7	7.5	7.2
Switzerland . . . . .		10.1	5.8	5.1	8.6	7.5	6.1	6.0	1.1	1.1	0.9	0.9
Italy . . . . .		5.9	5.1	5.1	8.7	7.5	8.3	8.7	10.5	8.5	6.8	8.5
Germany <i>b</i> . . . . .			5.1	5.0	2.7	2.2	2.3	3.7	5.3	4.7	5.1	8.3
Hides and skins												
European imports . . . . .	148		129	101	99	125	129	104	132	132	126	86
of which United Kingdom . . . . .		24	43	35	31	42	41	27	29	31	37	25
France <i>b</i> . . . . .		11	15	10	12	16	19	14	17	17	18	13
Germany <i>b</i> . . . . .		34	19	13	15	17	15	16	29	21	13	10
Rubber												
European imports . . . . .	112		128	133	136	158	143	148	182	198	183	189
of which United Kingdom . . . . .		35	34	48	45	61	55	54	59	72	70	71
France <i>b</i> . . . . .		27	24	28	24	27	27	26	36	35	36	35
Germany <i>b</i> . . . . .		27	24	19	25	24	16	27	35	22	20	26

NOTE. — All 1938 data for Austria and Germany have been taken from statistical publications of these two countries; the figures do not include their mutual trade.

<sup>a</sup> For the composition of the commodity groups and information on conversion factors employed, see ECONOMIC SURVEY OF EUROPE IN 1949, Appendix B, page 260.

<sup>b</sup> United Kingdom, Iceland, Ireland, France, the Netherlands, Belgium-Luxembourg, Switzerland, Italy, Greece, Spain, Portugal, Turkey, Denmark, Sweden, Norway, Finland, Germany, Austria and other European countries (including the U.S.R.); the figures for mineral oil include the trade of Poland, Hungary, Rumania and Yugoslavia; and the figures for timber, wood-pulp, raw wool, raw cotton,

Table  
PRICES OF BASIC  
U.S. dollars

Commodity	Market	Specification	Type of price
Coal . . . . .	United States United Kingdom Western Germany France Italy Sweden	Mine-run bituminous at destination . . . . . Welsh, Best Admiralty, f.o.b. Cardiff . . . . . Mine-run bituminous at pit-head <sup>a</sup> . . . . . Mine-run flénus, including taxes . . . . . Mine-run industrial, Genoa . . . . . Polish, c.i.f. East Coast <sup>f</sup> . . . . .	Domestic Domestic Domestic Domestic Domestic Import
Coke . . . . .	United States United Kingdom Western Germany France Italy	Beehive, Connellsville, furnace . . . . . Metallurgic . . . . . Broken quality I and II . . . . . Metallurgic, including taxes . . . . . Metallurgic, free-price, Milan . . . . .	Domestic Domestic Domestic Domestic Domestic
Steel scrap . . . . .	United States United Kingdom France Italy	Heavy melting, Pittsburgh . . . . . F.o.b. North-East Coast . . . . . F.M.I. 150/50/50, including taxes . . . . . Free market, Milan . . . . .	Domestic Domestic Domestic Domestic
Pig-iron . . . . .	United States United Kingdom Western Germany France Italy	Basic iron f.o.b. mill or shipping point . . . . . Basic, free delivery . . . . . Casting No. III . . . . . P.L.3, foundry, f.o.b. including taxes . . . . . Free market, Milan . . . . .	Domestic Domestic Domestic Domestic Domestic
Steel bars . . . . .	United States United Kingdom Western Germany France Belgium Italy	Merchant bars, Carbon steel . . . . . Hot-rolled . . . . . Small angles and tees . . . . . Rounds and squares less than 76 mm . . . . . Free, Oberhausen . . . . . F.o.b. Antwerp . . . . . Thomas bars . . . . . Thomas bars . . . . . Mild Thomas bars . . . . . F.o.b. Antwerp, free market . . . . . Hot-rolled shapes, free market, Milan . . . . .	Domestic Export Domestic Export Domestic Export Domestic Export Domestic Export Domestic
Fuel oil (U.S. dollars per barrel) . . . . .	United States United Kingdom France Italy	Gulf-Coast cargoes . . . . . Gas and Diesel . . . . . Light; price at port . . . . . Milan . . . . .	Domestic and Exp. Domestic Import Domestic
Aluminium . . . . .	United States United Kingdom Western Germany France Italy	Virgin ingot, 99% pure, delivered New York . . . . . Virgin ingot, delivered . . . . . Non-alloyed pig, 99% pure . . . . . Ingot, 99% pure, including taxes . . . . . Ingot, 99% pure, free market, Milan . . . . .	Domestic Domestic Domestic Domestic Domestic
Copper . . . . .	United States United Kingdom Western Germany France Italy	Electrolytic, f.o.b. refinery New York <sup>k</sup> . . . . . Electrolytic, Ministry of Supply selling price . . . . . Electrolytic, basic price from stocks . . . . . Electrolytic, cathodes, including taxes . . . . . Electrolytic, free market, Milan . . . . .	Domestic Domestic Domestic Domestic Domestic
Lead . . . . .	United States United Kingdom Western Germany France Italy	Pig, desilverized, f.o.b. New York . . . . . Soft, foreign, duty paid, Ministry of Supply selling price . . . . . Basic price to producer . . . . . Standard grades, including taxes . . . . . Ingots, first melting, free market, Milan . . . . .	Domestic Domestic Domestic Domestic Domestic

Sources : See "Notes to the Statistics".

NOTE. — "n.q." indicates that the price of the commodity was not quoted during the period.

<sup>a</sup> For details about premium charges over and above these quotations, see Chapter 6.

<sup>b</sup> Mine-run industrial (including taxes).

<sup>c</sup> January–August 1949.

<sup>d</sup> October–December 1949.



XXX  
COMMODITIES  
per ton

Actual price in U.S. dollars per ton										November 1951 as percentage of			
Year 1948	June-Aug. 1949	Dec. 1949	June 1950	Dec. 1950	March 1951	June 1951	Sept. 1951	Oct. 1951	Nov. 1951	June-Aug. 1949	June 1950	March 1951	June 1951
8.9	9.4	9.6	9.6	9.6	9.9	10.0	10.2	10.2	10.2	109	106	103	102
11.1	11.5	8.0	8.1	8.1	8.7	8.7	8.7	8.7	8.7	76	107	100	100
7.0	8.7	6.9	6.9	7.4	7.4	7.4	7.4	7.4	7.4	85	107	100	100
12.3 <sup>b</sup>	14.2	10.8	10.8	10.8	10.8	12.2	15.0	15.4	15.4	108	143	143	126
25.4	22.6 <sup>c</sup>	20.3 <sup>d</sup>	18.1 <sup>e</sup>	20.0	26.4	28.8	28.8	28.0	28.0	124	155	106	97
20.2 <sup>g</sup>	..	16.3	12.8	16.0	24.0	23.2	24.7	24.7	24.7	..	194	103	106
14.8	14.8	14.6	15.7	16.1	16.3	16.3	16.3	16.3	16.3	110	104	100	100
..	14.2	10.1	10.1	10.1	11.0	11.0	11.0	11.2	11.2	80	111	102	102
11.1	..	11.2	11.2	12.5	12.5	12.5	12.5	12.5	12.5	..	112	100	100
..	19.3	14.7	14.7	14.7	14.7	17.0	20.8	20.9	20.9	108	142	142	123
..	35.7	31.2	29.4	30.6	34.1	35.2	39.0	39.0	39.0	109	133	114	111
40.6	21.4	30.5	43.2	45.8	44.4	44.4	44.4	44.1	44.1	206	102	99	99
15.3	15.3	10.6	10.8	10.8	10.8	11.2	16.7	17.0	17.0	111	157	157	152
13.8	15.9	12.1	12.3	16.4	16.7	16.7	16.8	16.9	16.9	106	137	101	101
28.7	22.6 <sup>h</sup>	19.2	16.0	44.8	48.0	48.0 <sup>i</sup>	51.2	65.3	71.2	315	445	148	148
44 <sup>j</sup>	45	45	45	51	51	51	51	51	51	113	113	100	100
37	39	27	29	29	30	30	32	32	32	82	110	107	107
38	43	34	34	40	40	40	52	52	61	142	179	153	153
49	57	43	44	44	44	52	54	64	64	112	145	145	123
..	99	91	55	71	85	86	83	83	83	84	151	98	97
..	74	74	76	82	82	82	82	82	82	111	108	100	100
..	93	88	88	94	..	..	..	..	..	..	..	..	..
..	86	60	60	60	61	61	75	75	75	87	125	123	123
..	104	72	70	76	89	89	126	126	126	121	180	142	142
..	64	54	54	60	60	60	71	71	80	125	148	133	133
..	125	58	54	93	111	140	135	..	140	112	259	126	100
..	79	59	59	59	60	70	70	85	86	109	146	143	123
..	116	..	49	92	120	140	130	..	135	116	276	113	96
..	..	61	53	75	75	84	84	84	84	..	158	112	100
..	96	58	53	120	145	150	145	145	145	151	274	100	97
..	157	144	103	142	150	153	150	150	154	98	150	103	101
3.88	2.89 <sup>h</sup>	3.06	3.10	3.33	3.36	3.33	3.36	3.36	3.36	116	108	100	101
7.58	7.05 <sup>h</sup>	5.69	5.94	6.12	6.62	5.44	5.64	5.64	5.64	80	95	85	104
4.68	5.37 <sup>h</sup>	4.19	4.31	5.05	5.69	6.02	5.05	5.19	5.34	99	124	94	89
7.16	4.19 <sup>h</sup>	4.65	3.58	4.25	5.14	4.87	4.55	4.60	4.60	110	128	89	94
348	375	375	386	419	419	419	419	419	419	112	109	100	100
..	372	309	309	331	342	342	342	341	342	92	111	100	100
441	529	411	411	464	495	495	495	495	552	104	134	112	112
535	613	479	480	480	486	546	546	616	616	100	128	127	113
..	590-630	540-580	510-580	540-620	580-680	580-660	580-650	580-670	580-700	111	121	103	106
486	373	401	485	534	534	534	534	534	534	143	110	100	100
532	439	422	513	557	557	645	635	626	626	143	122	112	97
464	423	439	513	566	566	643	644	644	644	152	126	114	100
564	526	523	640	697	722	811	814	817	995	189	155	138	123
621	513	552	576	960	1,200	1,160	1,248	1,328	1,312	256	228	109	113
399	297	265	262	375	375	375	375	419	419	141	160	112	112
379	332	267	262	375	375	441	496	482	482	145	184	129	109
352	348	276	276	397	397	408	408	450	453	130	164	114	111
489	410	323	326	457	463	463	569	588	588	143	180	127	127
454	400	373	363	464	475	461	478	480	477	119	131	100	103

<sup>e</sup> January-June 1950.

<sup>f</sup> In 1948 and since 18 March 1951 average import price of coal from all sources.

<sup>g</sup> Average of eight months.

<sup>h</sup> August.

<sup>i</sup> July.

<sup>j</sup> July-December 1948.

<sup>k</sup> Since mid-1951, the United States import price has been \$606 per ton.

**Table**  
**PRICES OF BASIC**  
*U.S. dollars*

Commodity	Market	Specification	Type of price
Nickel . . . . .	United States United Kingdom	Cathodes . . . . . Cathodes, Ministry of Supply selling price . . . . .	Domestic Domestic
Tin . . . . .	United States United Kingdom Italy	Grade A, 99.8% or higher, New York . . . . . Standard tin . . . . . Pure, ingots, free market Milan . . . . .	Import price Auction price Domestic
Zinc . . . . .	United States United Kingdom Western Germany France Italy	Prime Western, f.o.b. New York . . . . . G.O.B. foreign, duty paid, Ministry of Supply selling price . . . . . Basic price to producer . . . . . Prime, including taxes . . . . . Ingots, first melting, free market, Milan . . . . .	Domestic Domestic Domestic Domestic Domestic
Rubber . . . . .	United States  United Kingdom	Synthetic, GR-S . . . . . Ribbed smoked sheets . . . . . No. 1, Ribbed smoked sheets . . . . .	Domestic Auction <sup>1</sup> Auction
Cotton . . . . .	United States Brazil Egypt	American middling, average 10 markets . . . . . Sao Paulo No. 5, excluding export tax (2.5-3%) . . . . . Ashmouni good, Alexandria spot market . . . . . Karnak good, Alexandria spot market . . . . .	Auction Domestic Export price Export price
Wool . . . . .	United States  United Kingdom  Western Germany France	Territory, 64's, 70's, 80's, scoured, Boston . . . . . Bright fleece, 56's, greasy, Boston . . . . . Dominion sales, London clean basis, 64's . . . . . Dominion sales, London clean basis, 48's . . . . . Domestic, quality A, ex stocks . . . . . Greasy, 100/105, inclusive of taxes . . . . .	Wholesale Wholesale Auction Auction Wholesale Wholesale
Jute . . . . .	United States United Kingdom Pakistan India	Raw, native first, New York . . . . . Daisee 2/3, C. and F., Dundee . . . . . Middle White, Narayanganji . . . . . First Grade, Calcutta . . . . .	Import price Import price Domestic Export price
Hessian (dollars per 100 yards) . . . .	United States United Kingdom India	10 oz, 40 inch, New York . . . . . 10½ oz, 40 inch, Dundee . . . . . 10½ oz, 40 inch, Calcutta . . . . .	Wholesale Wholesale Export price
Hard fibres . . . . .	United States Mexico United Kingdom	Manila abaca . . . . . Henequen, Grade A, f.o.b. New Orleans . . . . . Sisal, British East African, c.i.f. London . . . . .	Import Export Import
Rayon yarn . . . . .	United States United Kingdom Italy	Viscose, 150 denier, first quality, minimum filament . . . . . Spun yarn, Viscose, 1/36's tube . . . . . Viscose, Grade 150, second quality, Milan . . . . .	Wholesale Wholesale Wholesale
Copra . . . . .	United States Philippines Indonesia	C.i.f., Pacific Coast . . . . . Dried, Manila . . . . . Sundried A, Djakarta . . . . .	Import Export Export
Coconut oil . . . . .	Philippines Malaya	Manila . . . . . Singapore . . . . .	Export Export
Hides . . . . .	United States South Africa	Packers, green salted, Chicago . . . . . Sundried, grade 1 . . . . .	Domestic Domestic
Sugar . . . . .	Cuba	Raw, 96°, centrifugal, Havana . . . . .	Export
Coffee . . . . .	United States	Santos No. 4, f.o.b. ex-dock New York . . . . .	Import
Cocoa . . . . .	United States	Accra beans, bulk, f.o.b. New York . . . . .	Import
Wheat . . . . .	Canada	Manitoba, commercial exports . . . . . Manitoba, contract price . . . . .	Export Export

<sup>1</sup> From the beginning of 1951, official selling price.      <sup>m</sup> Nominal.      <sup>n</sup> June.

## COMMODITIES (continued)

per ton

Actual price in U.S. dollars per ton										November 1951 as percentage of			
Year 1948	June- Aug. 1949	Dec. 1949	June 1950	Dec. 1950	March 1951	June 1951	Sept. 1951	Oct. 1951	Nov. 1951	June- Aug. 1949	June 1950	March 1951	June 1951
..	882	882	1,058	1,089	1,113	1,246	1,246	1,246	1,246	141	118	112	100
..	888	886	1,063	1,093	1,118	1,184	1,250	1,250	1,250	141	118	112	106
2,187	2,271	1,742	1,715	3,208	3,210	2,601	2,271	2,271	2,271	100	132	71	87
2,187	2,267	1,665	1,658	3,206	3,630	2,325	2,611	2,794	2,657	117	160	73	114
2,436	2,626	2,334	2,045	3,701	4,040	3,341	3,070	3,152	3,130	119	153	77	94
313	229	231	344	401	401	401	403	447	447	195	130	111	111
318	271	236	349	416	416	441	524	524	524	193	150	126	119
307	327	259	321	408	408	419	419	461	464	142	145	114	111
380	372	289	429	497	503	546	591	651	651	175	152	129	119
..	400	370	440	520	580	600	640	700	720	180	164	124	120
408	408	408	408	540	540	540	573	573	573	140	140	106	106
485	372	387	682	1,574	1,592	1,455	1,147	1,147	1,147	308	168	72	79
481	407	386	669	1,364	1,698	1,158	1,230	1,206	1,222	300	183	72	106
745	706	668	745	939	992	997	770	820	919	130	123	93	92
675	705	677	794	1,405	1,588	1,155	1,120	1,182	1,367	194	172	86	118
1,215	842	961	n.q.	1,718	1,967	1,561	1,228	1,400	1,550	184	..	79	99
1,671	1,419	1,005	957	1,746	2,529	2,145	1,621	1,813	2,328	164	243	92	109
3,350	3,565	3,440	3,881	5,843 <sup>m</sup>	8,269 <sup>m</sup>	6,284 <sup>m</sup>	4,024 <sup>m</sup>	4,366	..	..	..	..	..
1,186	1,201	1,217	1,495	2,494 <sup>m</sup>	3,449	2,481	1,610 <sup>m</sup>	1,698	1,610 <sup>m</sup>	134	108	47	65
3,495	3,365	2,805	3,602	5,764	8,079	4,348	2,882	3,911	3,474	103	96	43	80
1,159	1,174	1,235	1,582	3,757	5,506	2,676	1,570	2,110	1,878	160	119	34	70
2,730	2,730	2,164	3,400	5,945	7,610	4,994	3,210	3,686	3,615	132	106	48	72
..	..	2,700	3,563	6,043	8,228	6,328	3,628	3,628	4,071	..	114	49	64
408	330 <sup>h</sup>	313	361	331	560	635	415	472	485	147	134	87	76
386	389 <sup>n</sup>	317	317	320	533	546	400	477	458	118	144	86	84
291	252	230	222	199	353	498	293	305	301	119	136	85	60
352	..	249	249	249	..	417	342	365	..	..	..	..	..
18.7	17.1 <sup>o</sup>	19.1	16.4	32.3	37.0	32.5	25.1	25.4	25.7	150	157	76	79
19.7	21.3	16.7	16.7	16.6	21.5	26.6	26.6	26.6	26.6	125	159	124	100
17.1	17.3 <sup>o</sup>	12.0	14.1	21.2	34.8	31.3	24.2	..	26.6	154	189	76	85
620	631 <sup>p</sup>	626	525	662	792	717	675	626	612	97	117	77	85
342	335 <sup>p</sup>	243	249	441	463	573	573	529	507	151	204	110	88
359	368	315	359	534	732	675	662	600	587	160	164	80	87
1,654	1,566	1,566	1,566	1,698	1,720	1,720	1,720	1,720	1,720	110	110	100	100
1,134	1,197	997	947	1,369	1,525	1,630	1,634	1,634	1,634	137	173	107	100
2,026	2,034	1,880	1,624	1,768	1,984	1,985	1,985	1,985	1,985	98	122	100	100
308	180	197	190	243	303	199	200	209	192	107	101	63	96
258	148	163	172	184	254	149	154	166	147	100	85	58	99
276	199	166	214	197	229	211	174	178	178	89	83	78	84
490	280	315	300	366	465	310	295	310	290	104	97	62	94
534	388	324	312	409	546	379	365	364	338	87	108	62	89
606	452	478	512	745	787	728	708	670	459	102	90	65	63
601	549	437	473	489	701	404	402	410	412	75	87	59	102
93	91	91	93	118	121	163	121	119	119	131	128	98	73
591	613	1,081	1,054	1,197	1,208	1,182	1,196	1,202	1,196	195	113	99	101
876	459	571	679	761	847	845	752	708	650	142	957	77	77
96	75 <sup>p</sup>	74	69	68	77	80	84	84	86	87	80	90	93
65	76 <sup>p</sup>	69	69	68	77	80	84	84	86	88	80	90	93

<sup>o</sup> August. <sup>p</sup> January-August 1949.

**Table XXXI**  
NUMBER OF APPLICANTS PER 100 VACANCIES

Country	1947	1948	1949	1950	1950				1951		
					First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
France . . . . .	..	244	675	918	1,381	896	667	863	870	440	312
Netherlands . . . . .	67	90	180	257	333	235	183	289	344	215	302
Norway . . . . .	79	95	102	116	249	79	47	147	305	96	55
Sweden . . . . .	79	88	105	97	126	91	83	91	97	83	79
Switzerland . . . . .	63	74	270	268	646	171	88	257	164	31	28
United Kingdom . . . . .	46 <sup>a</sup>	76	88	63	96	53	53	52	51	41	39

NOTE. — In general, the figures were obtained by averaging end-of-month data for 12 or 3 months. For Sweden, however, new applications and new vacancies registered during the month were taken into account, and for the United Kingdom placements and not applications.

<sup>a</sup> August–December.

**Table XXXII**  
UNEMPLOYMENT <sup>a</sup> OUTSIDE AGRICULTURE

Country	NUMBER OF UNEMPLOYED (Thousands)					Unemployed as approximate percentage of wage and salary earners
	1948 (Monthly averages)	1949	1950	1950	1951	
				September	September	1950
Norway . . . . .	19	7	9	4	4	1
Sweden . . . . .	23	25	20	9	8	1
United Kingdom . . . . .	285	286	290	294	229	1–2
France <sup>b</sup> . . . . .	16	52	51	43	28	0–1
Netherlands . . . . .	36	52	68	53	75	2–3
Switzerland . . . . .	3	8	10	3	1	1
Austria . . . . .	42	89	126	85	67	7
Denmark . . . . .	46	53	53	32	37	5
Finland . . . . .	2	18	17	—	—	2
Ireland . . . . .	35	35	30	25	26	5
Belgium . . . . .	79	168	159	136	133	8
Italy . . . . .	1,700	1,600	1,527	1,258 <sup>c</sup>	1,359 <sup>c</sup>	15
Germany : western zones . . . . .	640 <sup>c</sup>	1,123	1,456	1,178	1,160	10
West Berlin . . . . .	..	191	285	292	268	29

Sources : See "Notes to the Statistics".  
<sup>a</sup> Wholly unemployed only.

<sup>b</sup> Recipients of unemployment compensation.  
<sup>c</sup> Second half 1948.



**Table XXXIII**  
**ESTIMATED ENERGY, PROTEIN AND FAT CONTENT OF FOOD SUPPLIES PER PERSON**

Country	CALORIES (Number per day)			TOTAL PROTEIN (Grammes per day)			ANIMAL PROTEIN (Grammes per day)			FATS FROM ALL SOURCES (Grammes per day)		
	1934-1938	1949/50	1950/51 <sup>a</sup>	1934-1938	1949/50	1950/51 <sup>a</sup>	1934-1938	1949/50	1950/51 <sup>a</sup>	1934-1938	1949/50	1950/51 <sup>a</sup>
Belgium . . . . .	2,820	2,890	2,910	84	85	85	34	41	40	93	107	106
France . . . . .	2,830	2,680	2,700	93	91	91	39	41	41	88	83	85
Ireland . . . . .	3,390	3,450	3,460	99	96	97	48	47	49	106	118	114
Netherlands . . . . .	2,920 <sup>b</sup>	2,970	3,020	87	81	81	44	39	39	108	108	119
Switzerland . . . . .	3,110	3,190	3,300	95	98	101	54	52	53	105	109	113
United Kingdom . . . . .	3,120	3,090	3,080	83	91	90	46	46	46	125	126	126
Denmark . . . . .	3,410	3,180	3,300	91	103	100	57	59	58	150	132	141
Finland . . . . .	3,000	3,020	..	95	96	..	44	51	..	88	106	..
Norway . . . . .	3,220	3,140	3,180	91	102	104	51	56	58	120	127	133
Sweden . . . . .	3,120	3,200	3,160	95	94	92	59	60	59	118	131	129
Austria . . . . .	2,990	2,610	2,690	85	76	77	39	30	32	104	77	85
Germany : western zones . . . . .	2,960	2,690	2,800	83	79	78	40	33	35	113	80	97
Soviet Zone . . . . .	..	2,460	..	..	72	..	..	14	..	..	44	..
Greece . . . . .	2,600	2,490	2,510	84	77	79	23	19	19	69	69	65
Italy . . . . .	2,510	2,370	2,440	82	75	78	20	20	21	60	52	55

<sup>a</sup> Source : Food and Agriculture Organization of the United Nations.

<sup>a</sup> Provisional estimates supplied by Governments in March 1951.

<sup>b</sup> 1936-1938.

Table XXXIV  
DOMESTIC FOOD SUPPLIES OF SELECTED COMMODITIES  
Kilogrammes per person per year

Country	CEREALS <sup>a</sup>			POTATOES <sup>b</sup>			MEAT <sup>c</sup>			MILK <sup>d</sup>			SUGAR <sup>e</sup>		
	1934-1938	1949/50	1950/51 <sup>f</sup>	1934-1938	1949/50	1950/51 <sup>f</sup>	1934-1938	1949/50	1950/51 <sup>f</sup>	1934-1938	1949/50	1950/51 <sup>f</sup>	1934-1938	1949/50	1950/51 <sup>f</sup>
Belgium . . . . .	115	106	109	157	144	149	46	43	43	81	98	99	28	29	30
France . . . . .	124	117	117	143	129	130	53	57	54	86	90	92	24	23	22
Ireland . . . . .	131	135	132	195	188	188	55	53	51	141	160	163	38	35	42
Netherlands . . . . .	107 <sup>g</sup>	94	99	116	170	144	38	29	31	146	202	196	29	36	35
Switzerland . . . . .	110	120	120	91	84	96	56	45	47	241	238	238	38	37	40
United Kingdom . . . . .	94	103	101	79	115	110	60	43	46	99	154	158	46	34	35
Denmark . . . . .	94	107	101	122	138	146	75	65	67	167	174	173	50	31	39
Finland . . . . .	128	118	..	181	137	..	33	28	..	260	259	..	28	29	..
Norway . . . . .	119	116	116	130	123	127	38	35	37	188	254	253	30	25	23
Sweden . . . . .	95	87	85	122	117	116	49	48	47	250	246	237	43	47	47
Austria . . . . .	138	127	126	96	106	106	49	30	36	166	128	138	24	23	24
Germany : . . . . .	113	113	104	176	203	192	51	31	38	127	104	116	24	23	27
western zones . . . . .	..	141	..	..	197	..	..	19	..	..	52	..	..	20	..
Soviet Zone . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Greece . . . . .	163	147	153	14	39	34	20	12	12	42	31	31	10	9	10
Italy . . . . .	164	153	157	37	33	30	20	17	19	36	47	50	7	11	11

Source : Food and Agriculture Organization of the United Nations.

<sup>a</sup> In terms of flour and milled rice.

<sup>b</sup> Including potato flour in terms of potatoes.

<sup>c</sup> Total meat, including offal, poultry, etc.

<sup>d</sup> Consumption of fresh whole milk only.

<sup>e</sup> Refined sugar, excluding syrup and honey.

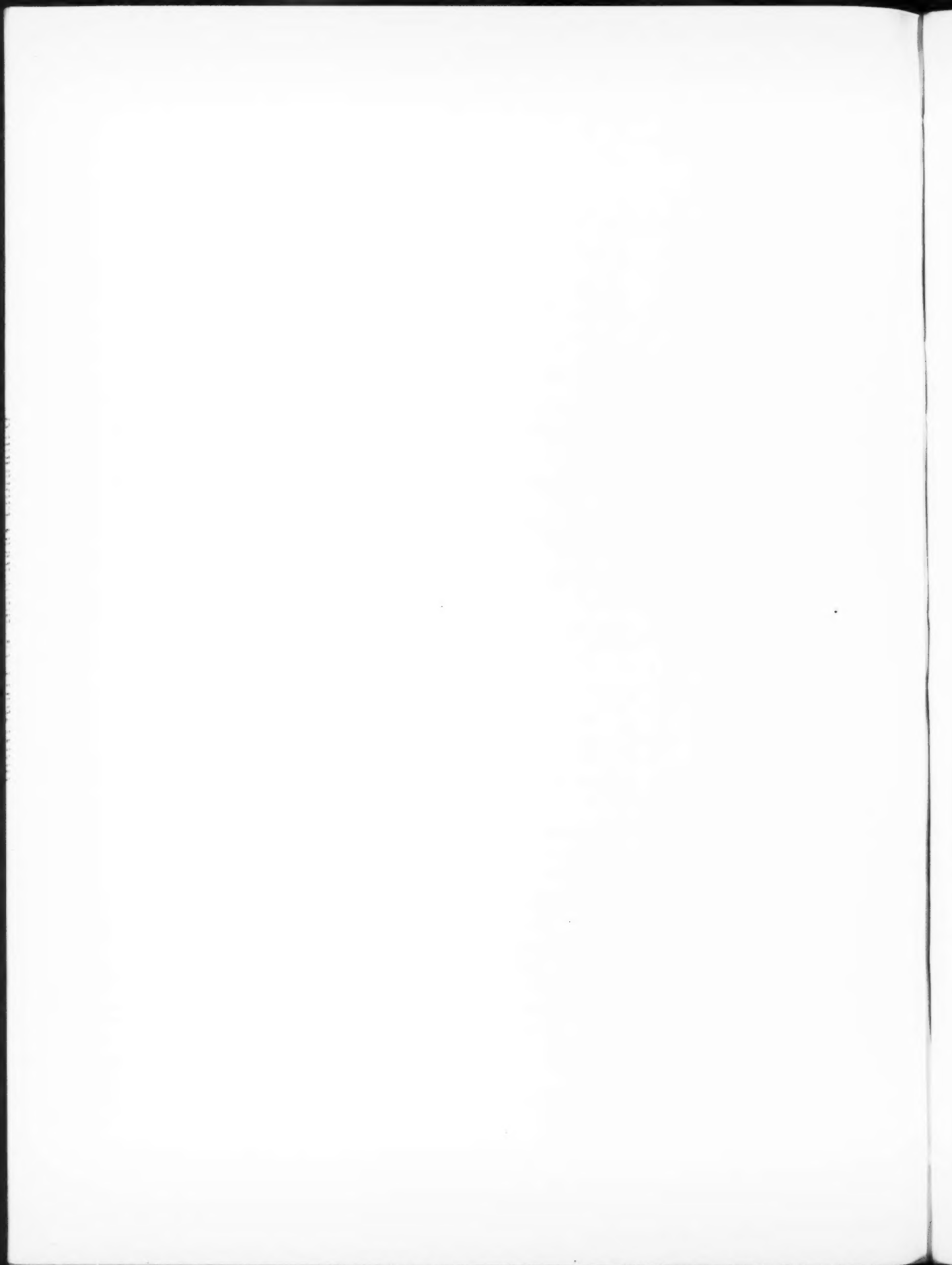
<sup>f</sup> Provisional estimates supplied by Governments in March 1951.

<sup>g</sup> 1936-1938.

Table XXXV  
RETAIL PRICES AND PRICE MOVEMENTS IN THE SOVIET UNION FOR SELECTED COMMODITIES  
(Current roubles)

Commodity	Unit	Retail prices in State shops in Moscow			Index numbers based on announced percentage decreases					Derived prices based on announced percentage decreases		
		1940 1 Jan.	1941 1 Jan.	1947 15 Dec.	1948 10 Apr.	1949 1 Mar.	1950 1 Mar.	1951 1 Mar.	1940 = 100	1950 1 Mar.	1951 1 Mar.	
A. Food products												
Rye bread.	kg.	0.85	1.00	3.00	100	90	67	57	235	200	2.00	1.70
Wheat bread (first quality)	kg.	1.70	1.70	7.00	100	90	63	54	259	221	4.40	3.75
Rye flour . . . . .	kg.	1.35	..	4.80	100	90	68	57	241	204	3.25	2.75
Wheat flour (72 per cent)	kg.	2.90	2.90	8.00	100	90	63	54	174	148	4.30	4.30
Shelled millet grit . . . . .	kg.	4.30	4.50	12.00	100	90	72	61	201	171	8.65	7.35
Buckwheat grit . . . . .	kg.	3.00	3.00	6.00	100	90	72	61	143	122	4.30	3.65
Macaroni . . . . .	kg.	6.10	6.10	10.00	100	90	67	57	111	94	6.75	5.75
Potatoes . . . . .	kg.	0.50	0.90	..	100	100	90	90	160	160	0.80	0.80
Apples . . . . .	kg.	6.40	10.00	12-18	100	100	80	80	150-225	150-225	9.60-14.40	9.60-14.40
Beef . . . . .	kg.	10.50	18.00	30.00	100	90	68	58	195	166	20.50	17.45
Butter (first quality)	kg.	21.00	28.00	64.00	100	90	63	54	192	163	40.30	34.25
Milk . . . . .	litre	2.10	2.30	3.00-4.00	100	100	90	81	129-171	117-155	2.70-3.60	2.45-3.25
Eggs . . . . .	piece	0.85	0.75	1.2-1.6	100	100	85	75	118-159	106-141	1.00-1.35	0.90-1.20
Vegetable oil . . . . .	litre	15.65	15.65	30.00	100	100	90	90	173	173	27.00	27.00
Tea . . . . .	100 gr.	10.00	10.00	16.00	100	100	90	81	144	130	14.40	12.95
Coffee . . . . .	kg.	48.20	49.00	75.00	100	100	82	74	128	115	61.50	55.35
Beer . . . . .	0.5 litre	..	..	7.00	80	80	56	56	..	..	3.90	3.90
Vodka . . . . .	0.5 litre	..	..	60.00	80	58	48	43	..	..	28.80	25.90
Salted herrings . . . . .	kg.	..	10.00	20.00	100	90	81	73	..	..	16.20	14.60
Salt . . . . .	kg.	0.05	0.05	1.40-1.60	100	70	43	33	347	347	0.60-0.70	0.45-0.55
Sugar, granulated . . . . .	kg.	3.80	5.00	15.00	100	100	88	88	1200-1400	900-1100	13.20	13.20
Caviar . . . . .	kg.	100.00	100.00	400.00	90	90	63	57	252	227	252.00	226.80
B. Manufactured goods												
Calico . . . . .	metre	3.50	7.50	10.10	100	100	85	85	246	246	8.60	8.60
Satinette . . . . .	metre	7.50	14.50	25.20	100	100	85	85	285	285	21.40	21.40
Woollen cloth, mixed	metre	75.00	120.00	108.00	100	90	79	79	114	114	85.55	85.55
Woollen cloth, pure	metre	210.00	415.00	450.00	100	90	79	79	170	170	356.00	356.00
Crêpe de Chine . . . . .	metre	90.00	114.00	137.00	100	90	79	79	120	120	108.00	108.00
Women's clothes, cotton . . . . .	piece	..	..	77.00	100	100	87	87	..	..	67.00	67.00
Women's clothes, woollen . . . . .	piece	..	..	510.00	100	88	79	79	..	..	404.00	404.00
Men's suit (2 pieces) mixed woollen . . . . .	piece	..	..	430.00	100	88	79	79	..	..	302.00	302.00
Men's suit (2 pieces) pure wool . . . . .	piece	900.00	1,130.00	1,400.00	100	88	79	79	123	123	1,108.00	1,108.00
Women's jacket, mixed wool . . . . .	piece	..	..	190.00	100	88	79	79	..	..	133.75	133.75
Women's stockings, cotton . . . . .	pair	4.50	8.50	7.00	100	100	85	85	132	132	5.95	5.95
Men's socks, rayon . . . . .	pair	7.50	10.00	17.00	100	100	75	75	170	170	12.75	12.75
Men's leather shoes . . . . .	pair	175.00	280.00	260.00	100	100	85	85	126	126	221.00	221.00
Women's shoes . . . . .	pair	325.00	325.00	260.00	100	100	85	85	..	..	221.00	221.00
Men's rubber overshoes . . . . .	pair	19.65	33.00	45.00	100	100	90	90	206	206	40.50	40.50
Toilet soap . . . . .	kg.	..	..	40.00	100	80	40	34	..	..	16.00	13.60
Laundry soap . . . . .	kg.	3.10	3.10	13.00	100	100	60	51	252	215	7.80	6.65
Kerosene . . . . .	litre	0.65	0.65	2.00	100	100	90	70	277	215	1.40	1.40
Matches . . . . .	box	0.05	0.05	0.20	100	100	75	50	300	200	0.15	0.10
Cigarettes . . . . .	box of 25	2.70	2.70	6.30	90	81	65	59	152	137	4.10	3.70
Comb (plastic) . . . . .	piece	..	..	4.00	80	64	51	46	..	..	2.05	1.85
Wrist watch . . . . .	piece	..	..	900.00	88	62	49	44	..	..	443.00	399.00
Gramophone . . . . .	piece	..	..	900.00	80	64	48	48	..	..	432.00	432.00
Radio set . . . . .	piece	..	..	600.00	90	72	61	55	..	..	367.00	330.00
Camera . . . . .	piece	..	..	1,100.00	90	81	65	65	..	..	713.00	713.00
Newspaper . . . . .	copy	0.10	0.10	0.20	100	100	100	100	200	200	0.20	0.20

Sources: See "Notes to the Statistics".





## APPENDIX B

### NOTES TO THE STATISTICS

#### I. GENERAL

The following notes concern mainly statistical series which appear for the first time in the present SURVEY and corrections and additions to series which were used in the preparation of the previous SURVEY (1950), and of the *Economic Bulletin for Europe*, Vol. 3, Nos. 1 and 2.

The statistics given should be regarded in the first place as basic documentation for the economic analysis made in the SURVEY. They are therefore somewhat different in nature from statistics normally published in statistical yearbooks and other publications of a purely statistical nature. First, when no official figures are available, it is often preferable to have an estimate rather than no figure at all. Consequently, estimated figures which have a wider margin of error than is usually allowed in statistical publications are sometimes shown in the various tables. In the second place, the available national statistics have, for the sake of comparability as between countries, often been adjusted to more uniform definitions. For this reason, the figures shown differ in many instances from those given in national publications, or other publications of the United Nations and its specialized agencies. Finally, the methods of compilation have been chosen with a view to the special use for which the data are intended. This does not necessarily mean that for other purposes other methods might not have been preferable.

Where a table gives totals for a number of countries, these totals always refer to the same group of countries for each period shown. In cases where figures for a given country are not available for one or more periods, estimates of these missing figures are included in the totals. Except where otherwise stated, totals labelled "European totals" include estimates for those countries for which no data are available, or assume that the series for the missing country moved in proportion to the average for the other countries.

Slight discrepancies between constituent items and the totals shown in the tables are due to rounding.

The tables include information received up to 10 January 1952. In general, the most recent figures are to be regarded as provisional, and subject to revision.

#### II. INDEX NUMBERS OF INDUSTRIAL PRODUCTION (Tables I, III-V, 6 and 12, and Charts 1 and 5).

Annual indices have always been derived directly from or by straightforward adjustments of the indices published by the countries concerned.

##### *Weights*

While most European countries still calculate their production on the basis of pre-war weights, a few countries have revised their weighting systems and are now using post-war weights. In these cases (Czechoslovakia, Denmark, Finland, Luxembourg, Norway, Sweden and the United Kingdom), the new index numbers have been adopted for the post-war period. However, the link to 1938 is generally available on the basis of pre-war weights only, except in the case of the United Kingdom, for which the level of output in 1946 (the post-war base year) in relation to 1938 is available according to both pre-war and post-war weights. For this reason, the link between 1938 and the post-war years used is in all cases (including the United Kingdom) based on pre-war weights. The post-war year at which the link is made varies from country to country. Owing to a general tendency for changes in relative costs between pre-war and post-war to be negatively correlated with changes in relative output, the use of post-war weights for all countries would considerably lower the European total in relation to 1938. The use of post-war weights for the United Kingdom alone would lower the European index by 2 points in 1946 compared with 1938.

Quarterly index numbers (1948 = 100) were also derived from the national indices, and the internal weights refer either to a pre-war (Austria, Belgium, western Germany, Greece, the Netherlands, Italy, Poland) or to a post-war year. The coverage of the quarterly indices may be slightly less than that of the annual indices, and they may or may not be adjusted for the different number of days in the months and for public holidays during the working week. When there was a choice between an adjusted and an unadjusted index, the adjusted index has been preferred. The adjustment for Easter made to the United Kingdom index is explained in the *Economic Bulletin for Europe*, Vol. 3, No. 2, and this adjustment has been continued throughout. Whereas index numbers for western European countries cover a high proportion of industry and are calculated by weighting together a certain number of statistical series, each of which represents the position of one industry at any time in relation to a fixed period of reference, those for eastern Europe usually compare corresponding quarters of two successive years. This permits the progressive

inclusion of industries which are either new or have been newly brought under the control of Ministries for Industry. Attempts to link these official results and make quarterly indices on a fixed base generally give rise to various arithmetical inconsistencies, if account is taken of other statements.

Index numbers for several countries combined have been arrived at by weighting together the country indices. A general discussion of this weighting system was given in the SURVEY for 1950, page 210.

(a) *General Index of Production* (Tables I and 6, and Chart 1-B)

*Austria* : The index of the Institut für Wirtschaftsforschung has been revised in the case of building materials.

*Eastern Germany* : An index has been estimated from the information on plans and plan fulfilment, assuming a regular rate of progress during the year 1948/49. *Die Wirtschaft*, Berlin (1949), published a graph on page 259, showing the development of industrial production in 1947/48. By using the index numbers which can be read off from the graph, another series can be calculated. The two different sets of results are shown together below.

	1950				1951		
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
First method . . . . .	140	148	154	166	171	185	188
Second method . . . . .	131	146	151	182	160	183	184

Since a fall in production in the first quarter 1951 seemed unlikely, the first series has been used in computing the European average.

*Hungary* : The figures shown in Table 6 have been taken from various plan reports. Table I shows an approximate index which has been obtained by putting together all available information.

*Italy* : The index published by this country compares current civilian production with civilian production in 1938. In the SURVEY for 1950 and *Bulletins* for the first and second quarters of 1951, these figures had been adjusted in order to take account of armaments production in 1938 on the basis of Ministerial speeches. An examination of the industrial census for 1937-1939, however, shows that production of armaments accounted for only about 12 per cent of engineering production (and not 29 per cent, as had previously been supposed). The general index of production has consequently been revised.

*Poland* : Official plan fulfilment reports and *Wiadomości Statystyczne*, Central Statistical Office. The plan fulfilment reports give indices of industrial production, corresponding quarter of previous year = 100. *Wiadomości Statystyczne* publishes a regular monthly series of index numbers with base 1949 = 100 (for earlier periods 1947 = 100). The information thus obtainable can be collated as follows :

*Index Numbers of Industrial Production : corresponding period of previous year = 100*

	As derived from plan fulfilment reports	As derived from regular series of industrial production		
		Original base 1947=100	Original base 1949=100	Original base 1949=100
		All Industry		State industry
1949 (Year)	123 <sup>a</sup>	122	122	122
1950 (Year)	126	133	131	129
First quarter	128	136	..	134
Second quarter	122	133	..	129
Third quarter	127	132	..	128
Fourth quarter		131	..	124
1951 First quarter	121		127	
Second quarter	123		..	
Third quarter	120		..	

<sup>a</sup> All industry.

Table 6 : The figures in italics in the above table have been used. It should, however, be noted that the coverage of the indices from the two sources is not identical. Those derived from the plan fulfilment reports refer to large and medium scale industries, and have been used in Table 6, as the coverage is the same as for employment and productivity.

Table I : The series of index numbers of production for State industry on base 1947 = 100 was linked to that on base 1949 = 100. The second and third quarters of 1951 have been estimated from plan results in 1951 (for State industry) compared with existing data for 1950.

*Yugoslavia* : The annual index is based on information supplied by the Statistical Office. The quarterly index has been arrived at by roughly weighting together 30 separate commodity series, communicated by the same source and linking the index number thus derived to the annual index.

*United States* : Text table, page 5, and Chart I-B, Survey of Current Business, United States Department of Commerce—index adjusted for seasonal variation.

(b) *Production of the Engineering Industries* (Table III and Chart 5)

*Eastern Germany* : The indices are derived from plans and plan fulfilment reports from one year to another as given in the following sources : *Die Wirtschaft, Zeitschrift für Fragen der Deutschen Wirtschaft*, Berlin ; *Tägliche Rundschau*.

*Italy* : The index has been revised as explained in (a) above.

*Poland* : Table III does not show an index for Poland, and no estimate for this country has been included in the European total. There are indications, however, that although the weight for Poland is by no means inconsiderable, inclusion of an accurate index for Poland would not greatly affect the movement of the European total. For it appears from the calculation given below that the movement of engineering production in Poland has not greatly deviated from the average for all countries.

An approximate index of engineering production can be calculated from statistics published in *Wiadomości Statystyczne*. The series used are the following : production of cycles, nails, agricultural machines, machine tools, cables, electrical accumulators, electric lamps, radio receivers, telephone apparatus, electric motors, transformers, steel wire. Two weighting systems, giving a different relative importance to each series, depending on which industries are assumed to be represented by one given series, can be obtained from the data on employment and wages as given in the industrial statistics for 1947, with the following results (1947 = 100) :

	1949		1950		1951	
	a	b	a	b	a	b
First quarter . . . . .	169	181	195	210	206	235
Second quarter . . . . .	173	180	195	209		
Third quarter . . . . .	173	174	182	207		
Fourth quarter . . . . .	190	207	199	227		

(c) *Production of the Textile Industry* (Tables 12 and V and text table, page 40)

*Eastern Germany* : The figures in Table 12 are derived from increases forecast in the plans and from percentage fulfilment.

*Hungary* : The figures in Table 12 have been derived from the plan fulfilment reports and refer to woollen cloth and other textile materials.

*Poland* : Table V includes a quarterly index. The statistical information from *Wiadomości Statystyczne*, available until May 1951, refers to yarns and cloths of cotton, wool, flax, jute and rayon and to knitwear. The weights were estimated. The index has also been used in Table 12, but the comparison of the second and third quarters of 1951 with those of 1950 is based essentially on information for cotton and wool only, as given in the plan fulfilment report. The resulting figures have, however, been slightly modified so as to take account of the other textiles, using information for the months of April and May 1951.

*Yugoslavia* : Information received from the Statistical Office—cotton and wool yarn and cloth—arithmetical average of increases achieved.

The indices shown in the text table on page 40 have been derived by applying to the indices for 1950 (Table V) the index of textile production in the first half of 1951 (first half of 1950=100).

(d) *Production of the Chemical Industry* (Table IV)

The compilation of this table becomes increasingly difficult. At the end of 1949, Belgium and the Netherlands ceased publishing their indices. Moreover, neither Sweden, Switzerland nor Poland publishes separate indices, although their production is by no means negligible. Lastly, the official United Kingdom index has lately been published with a delay of about three months and, like that of the London and Cambridge Economic Service, is always subject to significant revisions. In these circumstances, and in spite of the reappearance of the Belgian index, excluding soap and soda products, and of the Dutch index, it has been considered inadvisable to calculate a total index for the countries listed in the table.

The purpose is unchanged—namely, the publication of an index covering basic chemicals (acids, alkalis and salts), fertilizers, vegetable and animal fats and oils, and miscellaneous chemical products (in other words, groups 311, 312 and 319 of the Standard International Industrial Classification, with the exception, however, of rayon production, which is often difficult to separate from the textile industry). Efforts are being continued to improve the other indices.

*Belgium* : New index calculated by the Institut de Recherches économiques et sociales, Louvain.

*France* : Production of soap is now included in the quarterly series.

*Eastern Germany* : The index shown represents the gross value of production and is derived from information given in *Die Wirtschaft*, 16 February 1951, 2 April 1951, 2 November 1951; *Einheit*, August 1950; *News of Germany*, 23 April 1949; *Neues Deutschland*, 22 February 1950.

*Italy* : Contrary to previous practice, chemical production, excluding that of rayon, has been taken.

*Netherlands* : A new index with an improved coverage has been communicated by the Central Statistical Office.

*Poland* : The index of production first shown in the SURVEY for 1950 has been continued on a quarterly basis; the quarterly indices do not include sulphuric acid and soda, but are nevertheless adjusted to be consistent with the annual index, which includes these two products.

(e) *Production of the Leather and Paper Industry* (Table 12)

The same sources have been used as for the other industries. As far as possible, leather and shoes have been covered on the one hand, and wood-pulp and paper on the other. The following table shows where the coverage is different from this definition (× indicates industry included).

	<i>Leather and Shoes</i>				<i>Paper and Pulp</i>	
	<i>Clothes</i>	<i>Leather</i>	<i>Shoes</i>	<i>Rubber</i>	<i>Paper</i>	<i>Printing</i>
Belgium . . . . .		×			×	
Czechoslovakia . . . . .		×	×	×	×	
Denmark . . . . .	×		×			×
Italy . . . . .			×		×	
Netherlands . . . . .		×	×	×	×	
Norway . . . . .			×		×	
United Kingdom . . . . .					×	×

In the case of Poland, the index relates to the production of leather uppers and of wood-pulp (*Wiadomości Statystyczne*), and in that of Yugoslavia to the gross value of production of leather and shoes and wood-pulp. Finally, for eastern Germany the figures are derived from a comparison of plans and plan fulfilment.

III. INDEX NUMBERS OF EMPLOYMENT, OF HOURS WORKED, AND OF PRODUCTION PER HEAD  
(Tables 6 and II)

*Table II.* An index of employment for the Saar has been calculated on the basis of official figures supplied from that country as follows :

(1938 = 100)					
1948.....	120	1949.....	129	1950.....	135
(1948 = 100)					
	1st quarter	2nd quarter	3rd quarter	4th quarter	
1949 . . . . .	106	107	107	110	
1950 . . . . .	112	112	113	115	
1951 . . . . .	116	117	118		

The index does not appear in *Table II*, but the figures have been used for the calculation of European averages.

*Table 6* (Employment). The indices were based on the same figures as those in *Table II*, with the following exceptions :

*Denmark* : Index of man-hours worked, described as "index of employment", published monthly in *Statistiske Efterretninger*.

*Sweden* : A chain index of man-hours worked has been derived from quarterly inquiries on wages published in the *Sociala Meddelanden*.



Table 6 (Hours). Reference is to the normal working hours per week with the exception of Italy (working hours per day).

The following sources have been used :

*Austria* : Institut für Wirtschaftsforschung, Vienna, direct information and *Monatsberichte*, October 1950.

*France* : Ministère du Travail.

*Western Germany* : *Statistische Berichte*. Arb. No. VI.

*Italy* : *Statistiche del lavoro*, Ministry of Labour.

*Switzerland* : *La Vie économique*.

*United Kingdom* : *Ministry of Labour Gazette* (hours worked in manufacturing industry).

#### Special note on Poland

Data on employment can be derived from the same sources as for production (see page 218) and are presented in a similar manner. The table below collates the information obtainable from the two sources :

*Index Numbers of Employment : corresponding period of previous year = 100.*

		<i>As derived from plan fulfilment reports</i>	<i>As derived from regular series of employment <sup>a</sup></i>					
			<i>Wage and salary earners Original base</i>		<i>Wage earners only Original base</i>		<i>Man-hours worked Original base</i>	
			<i>1947=100</i>	<i>1949=100</i>	<i>1947=100</i>	<i>1949=100</i>	<i>1947=100</i>	<i>1949=100</i>
1949	Year	<i>116</i>	112	109	111	109	110	109
1950	Year	<i>116</i>	115	115	114	114	115	116
	First quarter	..	116	..	115	..	119	..
	Second quarter	109	115	..	115	..	117	..
	Third quarter	..	113	..	113	..	115	..
	Fourth quarter	..	115	..	112	..	110	..
1951	Three months	<i>106</i>	..	114	..	112	..	113
	Six months	<i>107</i>						
	Nine months	<i>104</i>						

<sup>a</sup> State industry.

For Table II, the series of index numbers 1947=100 continued by that of 1949=100, has been used, as well as index numbers calculated from the plan fulfilment report for the second and third quarters of 1951. The figures in Table 6 are derived from those shown in italics above.

Table 6 : General Note

So far as possible, the original series for hours worked in industry have been adjusted in order to eliminate building, because building is not included in the index numbers of production, and hours worked in building are highly seasonal. The quarterly figures are averages of the end of the preceding quarter and the end of the quarter itself; half-yearly figures, averages of the ends of the three relevant quarters. The indices of production per head were obtained by comparing production with the product of employment and hours of work or with employment only. It should be noted that this method gives a crude ratio between industrial production, measured by its index, however imperfect, but presumed to be representative of the total of mining and manufacturing and gas, water and electricity, and the numbers employed (or the total number of working hours) in industry, measured by a corresponding index, however imperfect, but presumed to have the same coverage.

For the countries of eastern Europe, the plan fulfilment reports usually give two or three of the factors—employment, production, output per head—which are directly related to each other if they refer to the same industrial sector. In certain cases the third has been calculated from the two others. The results thus obtained do not always agree with other published statistics.

#### IV. BUILDING ACTIVITY (Table 55)

It should be noted that data for dwellings generally include reconstruction but not repairs. For some countries—in particular Finland, Italy, Spain, Sweden and Switzerland—original data on a quarterly basis have an incomplete territorial coverage (e.g., principal cities or urban districts). Unless otherwise stated, the index numbers are based on the number of housing units (apartments, dwellings, permits, etc.).

*Belgium*: *Bulletin de Statistique* for dwellings and *Agence économique et financière* for total building activity.

*Denmark*: *Statistiske Efterretninger*—floor space.

The figures do not include rural districts, for which six-monthly data only are available.

*Finland*: *Sosiaalinen Aikakauskirja* for dwellings authorized; *Economic Review* (Kansallis-Osake-Pankki) for dwellings completed (volume in m<sup>3</sup>) and employment.

*France*: *Bulletin mensuel de statistique*, supplement October-December 1951, for dwellings authorized (number of habitable rooms), and *Situation de la Construction en France* (Ministère de la Reconstruction et de l'Urbanisme) for other data on dwellings. The index of building activity is a component of the general index of industrial production.

*Western Germany*: *Wirtschaft und Statistik* gives dwellings authorized (including repairs), while *Der Wohnungsbau in der Republik Deutschland* gives man-hours worked in the construction of dwellings and also dwellings completed (other than repairs). The index of building activity is a component of the general index of industrial production.

*Italy*: *Bollettino Mensile di Statistica*—number of rooms.

*Luxembourg*: *Bulletin du Service d'Etudes et de Documentation économiques et de l'Office de la Statistique générale*.

*Netherlands*: *Maandschrift C.B.S.*

*Norway*: *Statistiske Meldinger*—floor space.

*Spain*: *Boletín de Estadística*.

*Sweden*: *Konjunkturjournalen*.

Employment has been derived by deducting the numbers unemployed from the total of insured workers, as given in *Sociala Meddelanden*.

*Switzerland*: *La Vie économique*—thirty-three towns only.

*United Kingdom*: *Monthly Digest of Statistics*. The index of building activity is a component of the general index of industrial production.

#### V. AGRICULTURAL PRODUCTION (Tables 7, 9, 10, 11, and VI, XIII, XIV and XV)

Unless otherwise stated below, the figures have been supplied by the Food and Agriculture Organization of the United Nations. The figures of trade have been taken from the usual national sources.

##### *Harvest Results, Trade and Supplies for Home Market of Grain, Potatoes and Sugar (Tables 7 and XIII)*

Harvest estimates for western European countries and Yugoslavia have been supplied by the Food and Agriculture Organization of the United Nations on a net basis. They thus represent either official published barn harvest figures or they have been adjusted by the Organization to that basis. The figures for eastern European countries have been taken from national statistics and often relate to the gross harvest—i.e., the potential harvest or "crop on root" rather than the actual harvest in the barn, after deduction of harvest, threshing and transport losses.<sup>1</sup>

The official harvest figures for Czechoslovakia and Poland appear to be net figures, whereas those for eastern Germany and Bulgaria, and Rumania (since 1950) and Hungary (since 1951) appear to represent gross harvest, and considerable deductions have been made so that the harvest figures for these countries should be comparable with those of western Europe.

These eastern European countries are attempting to approach Soviet methods of measurement, but cannot measure the "biological yields" for the whole harvest from samples, as is done in the Soviet Union, because differences of yield are considerable between the individual peasant holdings, which still account for the major part of the harvest.

<sup>1</sup> See note on harvest estimates in the Soviet Union, Appendix B to "Long-term Trends in European Agriculture", *Economic Bulletin for Europe*, Vol. 3, No. 2.

A description of the official methods of estimating the harvests and of adjustments which have been made to bring them to a net basis is given below :

**Bulgaria :** In the absence of other information, it was assumed that the sown area in 1950/51 was approximately the average of the 1939 sown area and that planned for 1953 (2.85 million hectares). Estimates for the yield for the whole country were not available but could be obtained on a gross and net basis for four important grain-growing districts.

Since 1950, all crops are determined by the biological method before the harvest by use of a sample. In addition, trial investigations are carried out on the actual harvest of grain. An official statement by the Minister of Agriculture indicates that harvest losses have been estimated to be as much as 15 to 30 per cent and unavoidable losses  $\frac{1}{2}$  to  $1\frac{1}{2}$  per cent.

For the four principal grain-growing districts, a comparison of gross and net estimates of grain is as follows.<sup>1</sup>

District	Gross harvest (biological yield)	Net harvest (harvest after threshing)	Percentage difference
<i>Tons per hectare</i>			
Pleven . . . . .	1.46	1.17	20
Nikopol . . . . .	1.42	1.04	27
Svichtov . . . . .	1.32	0.92	30
Loukovitch . . . . .	1.31	1.08	18
Average of four districts . . . .	1.38	1.05	24

By applying to the sown area given above the net yield of the four principal districts, a total grain harvest of 3.01 million tons is obtained. The proportion of bread grain to the total of grain was assumed to be the average of the year 1948/49 and the plan for 1953/54.

The potato and sugar beet harvest was supplied by the Food and Agriculture Organization of the United Nations for all the years considered. An approximate estimate was made of the 1951 harvest in bread grain and coarse grain for inclusion in the European total. Plan fulfilment reports for the second and third quarters of 1951 indicate a good harvest for grain and it was assumed, therefore, to have reached the 1934/1938 level.

**Czechoslovakia :** The 1949 harvest is given in *Statistický Zpravodaj*. The harvests for 1949 and 1950 (and 1951 in the form of index numbers based on the previous year) are given respectively in *Lidova Demokracie*, 19 February 1950 ; *Rude Pravo*, 25 February 1951 and 3 November 1951. The data published in these sources have been considered as net estimates. No figure is available for the potato harvest in 1951/52. For the purpose of inclusion in the European total, a harvest equal to that of the previous year was assumed.

**Eastern Germany :** In 1950, harvests were estimated both according to the traditional method and from samples for wheat, rye and potatoes. Furthermore, in 1951 there was a reorganization of methods which involved the appointment of official rather than private farming experts. The application of the sampling method was restricted to State farms, and instructions were issued to estimate " grain on the stalk " or " crop on root " for all other farms without taking samples, using as a check the measurement of threshing results in the fields. As a result, it is the potential (gross) harvest which is estimated rather than the actual (net) harvest, as in the past.

A comparison is made between former harvest estimates for eastern Germany, calculated on a net basis, and the latest estimates, which tend to cover in varying degrees gross rather than net production.<sup>2</sup>

<sup>1</sup> *Leçons du stockage des céréales contingentées*, by Valko Tchervenkov, Sofia, 1950, page 27.

<sup>2</sup> In western Germany, the harvest estimates for wheat, rye and potatoes are made up from samples of grain on the stalks immediately before the harvest in the same way as the biological yield is established in the U.S.S.R.; barn harvest is obtained by deducting normal losses of harvesting, threshing and transport to the barn. This method has long been used in the United States, and was introduced by the western Occupation Authorities in 1948. A comparison of harvest estimates according to the new method at various stages and according to the traditional method reads as follows for Northern-Rhine-Westphalia in 1949 :

	Winter wheat		Winter rye		Potatoes	
	Tons per hectare	Index numbers	Tons per hectare	Index numbers	Tons per hectare	Index numbers
Harvest according to sample . . . . .	4.07	100	3.27	100	29.76	100
Harvest after threshing Harvest in the barn, esti- mated by the new method . . . . .	3.39	83	2.88	88	26.69	90
Provisional harvest, esti- mated by the tradi- tional method . . . . .	3.22	79	2.74	84	25.90	87
	2.79	69	2.32	71	19.17	64

This comparison shows that harvest losses of 16-21 per cent have to be deducted for grains, and of 13 per cent for potatoes in order to obtain net harvest in a country with well-developed peasant farming. However, it is also possible that the traditional (subjective) method underestimates the harvest, especially if farmers can persuade the experts to estimate lower yields in order to reduce their delivery or tax obligations.

Commodity	Year	Latest official estimate	Previous estimates	Percentage difference
		(Thousands of tons)		
Bread grain . . . . .	1934-1938	3,614	3,360	—
	1947	2,015	1,901	6
	1948	2,940	2,769	6
	1949	3,408	2,950	16
	1950	3,620	2,950	23
	1951	4,488	3,660 <sup>a</sup>	23
Coarse grain . . . . .	1950	2,260	1,915	18
	1951	2,940	2,490 <sup>a</sup>	18
Potatoes . . . . .	1934-1938	13,575	13,630	—
	1947	8,055	7,230	11
	1948	12,408	11,550	7
	1949	9,932	8,499	17
	1950	14,645	13,060	12
	1951	15,151	13,480 <sup>a</sup>	12
Sugar beet . . . . .	1934-1938	5,412	5,412	—
	1947	3,122	2,826	11
	1948	4,583	4,379	5
	1949	3,867	3,545	9
	1950	5,731	5,398	6
	1951	6,230	5,900 <sup>a</sup>	6

<sup>a</sup> Estimated from the official (gross) figure.

The sources for the latest estimates are *Tägliche Rundschau*, Berlin, 1 November 1951 and 2 November 1951, and *Die Wirtschaft*, Berlin, 24 October 1951.

The figures for bread grain, potatoes and sugar beet are as published : those for coarse grain in 1950 were estimated from the 1955 planned output for grains and pulses, which is shown in relation to both 1934-1938 and 1950. The 1951 coarse grain harvest was estimated from the increase in yield given in the last source, assuming the same area under crop.

The sources for the earlier (net) estimates for 1947 and 1948 were *Statistische Praxis*, Berlin, 1948, No. 12, page 181, and *Statistical Yearbook*, United Nations, 1949/50.

Thirty seven thousand tons were added to the 1948 grain figure (based on information given by FAO) so as to include maize. The portion of total grain accounted for by bread grain in 1947 was obtained from the U.N. *Statistical Yearbook* and in 1948, 1949 and 1950 from figures given by FAO. For the sake of comparability with other European countries, the earlier (net) official estimates have been taken throughout, including those for 1950. In order to reduce the 1951 (gross) harvest figures to a net basis, a percentage was deducted corresponding to the proportion which the net harvest was to the gross harvest in 1950.

*Hungary* : For 1949/50, *Statisztikai Tájekeztató* gives sown area. Hungary's *Three-year Plan*, Budapest, 1947, gives planned yield and *The Fulfilment of the Three-year Plan* by Z. Vas, 1950, gives the fulfilment of the plan. The estimates refer to net harvest. Harvest figures for 1950/51 are taken from *Hungarian-Soviet Economic Review*, 1951, No. 3.

The plan fulfilment report for 1950 gives the over-all percentage increase in the bread-grain harvest. Details are given on area and yields in the *Review*. The coarse grain (including maize) and sugar-beet harvests have been roughly estimated on the basis of statements in the plan fulfilment report. For potatoes, an average yield given in the *Review* was applied to an area assumed to be the same as in the previous year. In the 1950/51 harvest season, the sampling method was used only for thirty to forty State farms and about 100 higher-grade farm co-operatives. Elsewhere, estimates were still of the net harvest and so the officially published figures have been used without adjustment.



Harvest data for 1951/52 have been derived from *Szabad Nép* of 10 September 1950, which gives the planned area for sowing and the plan fulfilment report for the second and third quarters. These reports give either harvest estimates or yields compared with the previous year, figures for which are generally available in the sources used for 1950/51. However, for the 1951/52 season the harvest was measured by a newly commissioned estimating agency taking "crop on the stalk" or "crop on root" for twenty-five crops, without deduction for losses which could be avoided. Thus, the only deductions made were those for unavoidable losses in harvesting, threshing and transport. Official sources<sup>1</sup> indicate that avoidable losses may be as much as 20 to 25 per cent for cereals. The figures shown in *Table XIII* for 1951/52 have been obtained by deducting 20 per cent from the official figures for wheat, rye, barley and oats, the results corresponding roughly to gross harvest less avoidable losses. For maize, no information is available, but the difference between the net and gross harvests was assumed to be small and no deductions were made. Ten per cent was taken off the gross harvest for potatoes and 5 per cent for sugar beet (the figures applicable to eastern Germany).

*Poland*: *Wiadomości Statystyczne (Statistical News)*, Warsaw 1949, No. 24; 1951, No. 2. The figures in these sources have been considered net estimates. For the purpose of inclusion in the European total, it was assumed that the 1951 crop of the four principal grains was the same as in the preceding year, this being the inference of a statement in the plan fulfilment report for the third quarter. The potato harvest was presumed to have declined to the 1949/50 level, as the harvest was officially reported to have been unfavourable.

*Rumania*: For 1950/51, estimates for bread grain and coarse grain were made on the basis of the plan fulfilment reports, which give information about the sown area and make certain general statements. The planned sown area for bread grain is given as 3.05 million hectares, and the plan fulfilment reports indicate that this target was achieved. In view of the considerably increased yield as compared with the previous years, in spite of the drought referred to in the plan fulfilment report, a yield of 0.92 tons per hectares—i.e., 90 per cent of the 1934-1938 average, was assumed. The area under coarse grain was taken as equal to that in an average of five pre-war years, and it was assumed that the total harvest of oats and barley was 85 per cent and of maize 75 per cent of the 1934-1938 average. These low estimates would seem justified in view of the drought and the failure to fulfil the plan for maize.

Estimates for the 1951/52 harvest were made only for inclusion in the European total and a grain harvest of the 1934-1938 level was assumed, since the plan fulfilment report for the second quarter indicates a very favourable harvest.

#### *Production, Trade and Home Supplies of Meat and Milk (Table 11)*

The conversion factors used for butter and cheese in milk equivalent are 1 : 21 for butter, and 1 : 10 for cheese.

The trade in condensed and powdered milk of the principal trading countries (e.g., Denmark, Ireland, the Netherlands, the United Kingdom, France and western Germany) has also been taken into account, the conversion factors in terms of liquid milk being 1 : 2.2 and 1 : 8.0.

Poultry has been included and also live animals (expressed in meat equivalent) in the case of the principal trading countries (e.g., Denmark, Ireland, the Netherlands and the United Kingdom).

*Czechoslovakia*: *Rúde Právo*, 25 February 1951, gives the percentage increase in milk production in 1950 compared with 1949, for which year a quantitative figure of output is available. The plan fulfilment reports for the second quarter of 1951 give the increase of production in the first half of 1951 compared with the first half of 1950.

*Eastern Germany*: *Tägliche Rundschau* of 2 November 1951 gives the number of cows at the end of 1950 and the average yield in that year, while *Die Wirtschaft* of 24 January 1951 gives the percentage increase of milk production in 1950 over the previous year. The increase in the first half of 1951 over the first half of 1950 was derived from plan fulfilment reports for the second quarter of 1951.

*Poland*: The production of milk in 1950 can be derived from *Dziennik Ustaw (Official Gazette)*, 1951, No. 18. In estimating the increase in the first half of 1951 over the first half of 1950, account was taken of the known increase of 8 per cent in dairy milk consumption and of 73 per cent in butter production, and also of the fact that some difficulty was experienced in implementing the planned yearly increase of 13 per cent for total milk production.

#### *Index Numbers of Agricultural Production (Table VI)*

Estimates for 1950 for eastern European countries were derived from the following sources :

*Czechoslovakia*: *Rúde Právo*, 2 January 1951.

*Hungary*: *Szabad Nép*, 17 May 1951.

<sup>1</sup> See *Statisztikai Szemle*, 1950, No. 3, pages 232-235, 1950, No. 12, pages 881-882 and 1951, No. 8, pages 744-747.

*Poland : Polish Facts and Figures*, London, 27 January 1951.

*Yugoslavia : Aperçu de la situation économique de la R.F.P. de Yougoslavie en 1950* (unpublished Government Memorandum).  
The 1950/51 percentage increase was derived from a comparison of output in value terms.

For a description of the index numbers and of the weighting system used, see page 229 of the SURVEY for 1950.

#### *Numbers of Cattle and Pigs (Table XIV)*

The figures for western Europe and Yugoslavia have been supplied by the Food and Agriculture Organization of the United Nations. For other eastern European countries the sources are as follows :

##### *(a) Cattle*

*Czechoslovakia : Bulletin of the National Bank of Czechoslovakia*, 1949, No. 9, gives the stock of cattle in 1949. *Rude Pravo*, 25 February 1951, states that the 1950 stock of cattle is less than pre-war. The estimate for 1950 shown in the table has been derived by applying the rate of increase for the preceding years. The 1951 cattle population is stated in *Rude Pravo*, 3 November 1951, to be the same as in 1950.

*Eastern Germany : Tägliche Rundschau*, Berlin, 2 November 1951, gives the number of cattle at the end of 1950, while *Die Wirtschaft*, Berlin, 16 February 1951, gives the 1949 figure in relation to 1950. *Der Volkswirtschaftsplan 1951*, Berlin, 1951, shows the planned increase in cattle population for that year, and *Die Wirtschaft*, 26 October 1951, gives its percentage fulfilment.

*Hungary : The 1938 figure is taken from Hungary's Three-year Plan*, Budapest, 1947, and the Plan Fulfilment Report for 1949, *Statisztikai Szemle*, 1950, gives the 1949 figure as a percentage of the pre-war years. *Statisztikai Tájékoztató*, 1950, No. 2, gives the 1950 figure in relation to 1938, and *Szabad Nép*, 1 July 1951, indicates that the number of cattle has decreased in many areas by 15 to 20 per cent.

*Poland : The figures for 1949 and 1950 are taken from Wiadomości Statystyczne*, 1949, No. 24, and *Polish Facts and Figures*, 21 April 1951. The figures for 1951 come from a commentary in *Radio Warsaw* on 20 September 1951.

*Rumania : The figures for 1950 are taken from L'édification nouvelle de la R.P. Roumanie*, Bucarest, 1951.

##### *(b) Pigs*

*Czechoslovakia : The 1949 and 1950 figures have been obtained from the same sources and by the same methods as for cattle.*

*Eastern Germany : Tägliche Rundschau*, 1 November 1951, gives the figures for 1950 and 1951. *Die Wirtschaft*, Berlin, 16 February 1951, shows the increase between 1949 and 1950.

*Hungary : The number of pigs in 1949 is given in Hungary's Revised Five-year Plan published in Statisztikai Szemle*, 1951. *Statisztikai Tájékoztató*, Budapest, 1950, gives the pig population in relation to 1938. According to a statement in *Szabad Nép*, 1 July 1951, the number of pigs decreased by 2 millions between May 1950 and February 1951.

*Poland : The figures for 1949 come from Wiadomości Statystyczne*, 1949, No. 24, and those for 1950 from *Polish Facts and Figures*, 21 April 1951.

*Rumania : L'édification nouvelle de la R.P. Roumanie*, 1951, gives the figure for 1950.

#### *Production of Livestock Products (Table XV)*

Besides the *Monthly Bulletin of Statistics*, United Nations, national statistical bulletins and other publications have also been used, as follows :

*Austria : Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung*. These figures, contrary to statements made in preceding *Bulletins*, are not limited to compulsory deliveries only.

*Belgium : Atlas de graphiques et tableaux statistiques*.

*Western Germany : Statistischer Monatsbericht des Bundesministeriums für Ernährung, Landwirtschaft und Forsten*.

*Ireland : Irish Industry*. The footnotes to the table indicate the coverage of the published figures.

## VI. PRODUCTION, CONSUMPTION AND TRADE OF MAJOR COMMODITIES

### (a) Coal (Tables 28, 70-78, VII, text tables on pages 66 and 166, and Charts 7 and 8)

#### General sources :

1. *Statistische Übersichten über die Kohlenwirtschaft Deutschlands und des Auslands, 1949*, Deutsche Kohlenbergbau-Leitung, Essen.
2. *Monthly Coal Statistics*, 1946 and 1947, European Coal Organization.
3. *Monthly Bulletin of Coal Statistics, 1947-1951*, Economic Commission for Europe.

#### Production, Trade and Available Supplies of Solid Fuels (Tables 28, 71 and 78 and Chart 7)

General sources, referred to above, and national trade statistics. As the geographical distribution of foreign trade is not always given in complete detail, some figures on trade are approximate only.

The distribution of the pre-war German trade over the post-war occupation zones and the trade between the zones were derived from transport statistics, as described in the *Economic Bulletin for Europe*, Vol. 1, No. 3.

#### Heat and Motive Power consumed (Table 70)

The basic data for this table were obtained from a great number of national sources, information supplied by Governments and general sources, such as the *Statistical Yearbook of the World Power Conference*.

The following calorific values were assumed :

	Millions of calories
1 ton of coal . . . . .	7,200
1 ton of lignite . . . . .	3,400 <sup>a</sup>
1 ton of peat . . . . .	3,600
1 cubic metre of hardwood . . . . .	2,000
1 cubic metre of softwood . . . . .	1,500
1 ton of liquid fuel . . . . .	10,800
1 cubic metre of natural gas . . . . .	9.55
1 kilowatt-hour of electricity . . . . .	0.86

<sup>a</sup> 4,300 for Austria, Czechoslovakia, France and Hungary.

Table A shows estimates of the calories latent in the main primary sources of energy used in various countries.

The figures represent estimates of the calories which could be used if there were no losses in using primary sources of energy. A mere addition of them would thus not yield either an estimate of the total energy which could theoretically in the existing state of knowledge be extracted from the primary sources used or an estimate of the total energy actually used. Nor would the resulting totals for each country be in a constant ratio to the total energy actually used, for two reasons :

(a) The losses involved in the use of solid and liquid fuels vary not only with the type of apparatus in which combustion takes place, but also with the way in which it is used and the use made of the resulting heat;

(b) The losses of energy involved in the transmission and transportation of hydro-electric power and in the transport and combustion of natural gas are considerably less than the losses connected with the use of any solid or liquid fuel.

In the totals given in Table 70, allowance has been made for the factor mentioned in (b) above, but, with one exception, no account has been taken of the differences between the efficiencies in actual use of the different types of primary solid and liquid fuels mentioned in (a).

It has been assumed in effect that the calories latent in hydro-electricity and natural gas should be given a weight twice as great as the calories latent in primary solid and liquid fuels. In choosing these weights, no fine calculations could be made, mainly because of lack of exact information on the proportions of each fuel burnt in different types of appliances or on the proportions of each fuel used to provide motive power and heat. Estimates of the efficiencies of different fuels in particular uses are given in various documents : *The British Fuel and Power Industries*, London, 1947; L. Musil : *Praktische Energie-wirtschaftslehre*, Vienna, 1949; United States Bureau of Mines : *Energy Uses and Supplies, 1939, 1947, 1965*, Information Circular 7582, Washington, D.C., 1950. When these efficiencies were applied to an extremely impressionistic distribution of each fuel over the different uses, a rough weighted average efficiency in use of one-third was derived for both solid and liquid fuels. (Liquid fuels can typically be used with a higher efficiency than solid fuels in any given use where the use of either is possible;

**Table A**  
TOTAL CALORIFIC VALUE OF PRIMARY SOURCES OF ENERGY  
*Quadrillions <sup>a</sup> of calories*

Country	Year	Solid fuels	Fuel wood	Liquid fuels	Natural gas	Hydro-electricity
Poland, pre-war territory . . . . .	1929	233	17	5	4	—
post-war territory . . . . .	1949	333	5	5	2	1
Belgium and Luxembourg . . . . .	1929	269	1	4	—	—
	1949	205	1	16	—	—
United Kingdom . . . . .	1929	1,299	—	56	—	1
	1949	1,420	—	135	—	5
Western Germany . . . . .	1929	858	21	12	—	22
	1949	776	25	28	1	30
Ireland . . . . .	1929	31	..	2	—	—
	1949	27	..	5	—	2
Netherlands . . . . .	1929	100	—	8	—	—
	1949	111	—	23	—	—
Denmark . . . . .	1929	39	1	4	—	—
	1949	44	1	12	—	1
France and the Saar . . . . .	1929	665	33	25	—	43
	1949	549	34	77	1	51
Austria . . . . .	1929	59	6	2	—	11
	1949	53	5	4	1	16
Portugal . . . . .	1929	8	8	1	—	1
	1949	9	7	5	—	1
Italy . . . . .	1929	106	23	10	—	66
	1949	77	22	33	2	81
Sweden . . . . .	1929	49	31	5	—	30
	1949	47	20	30	—	65
Finland . . . . .	1929	8	37	1	—	5
	1949	12	38	4	—	13
Switzerland . . . . .	1929	23	3	3	—	28
	1949	14	4	9	—	40
Norway . . . . .	1929	21	5	2	—	52
	1949	14	5	13	—	67
Total Europe (excluding U.S.S.R.) . . .	1929	4,560	290	173	12	280
	1949	4,490	276	459	30	400
United States . . . . .	1929	4,000	350	5,480	520	30
	1949	3,240	350	5,830	1,560	80

<sup>a</sup> 1 quadrillion = 10<sup>15</sup>, or 1 million billions.

their average efficiency in use is reduced, however, considerably because of the high proportion which is used in motor vehicles, where solid fuels cannot be used.) The average efficiency in use doubtless varies from country to country, and from time to time. Only in one case was allowance made for this : the open fireplace is far more widespread in the United Kingdom than elsewhere, and so much coal is burnt by households there that the average efficiency is likely to be lower than elsewhere. Allowance was made for this factor by assuming an efficiency of 15 per cent for coal burnt by British households.

Natural gas and hydro-electricity were assumed to have an over-all efficiency of two-thirds : the greater part of the losses are losses in transformation and transport.



*Age Distribution of Underground Coal Miners (Table 75)*

*Belgium* : Estimates made on the basis of data contained in *Annales des Mines de Belgique*, Vol. 50 (1951), pages 105 and 112.

*France* : Information supplied by the International Labour Organisation.

*Ruhr* : *Zahlen zur Kohlenwirtschaft*, December 1950. Deutsche Kohlenbergbau-Leitung.

*United Kingdom* : *The British Power and Fuel Industries, P.E.P. Report*, London 1947.

*Report and Accounts for 1950*, National Coal Board.

*Gross Investment in Hard-coal Mining (Table 76)*

*Belgium* : *L'Economie belge en 1948, 1949, 1950*.

*France* : Commissariat général du Plan de Modernisation et d'Equipement : *Etat des Opérations* and information supplied by Charbonnages de France.

*Western Germany* : *Report of the German Federal Government on the Progress of the Marshall Plan* and information from Arbeitsausschuss für die Produktionssteigerung im Bergbau.

*Great Britain* : *Report and Accounts*, National Coal Board.

The rates applied in converting the original figures in national currencies into United States dollars of 1950 purchasing power are the following :

	United States cents per unit of national currency				
	1947	1948	1949	1950	1951 and 1952
Belgium . . . . .	1.863	1.753	1.715	1.647	1.320
France . . . . .	0.6583	0.3834	0.3391	0.3161	0.2470
Great Britain . . . . .	396.4	368.9	364.3	358.0	290.0
Western Germany . . . . .				26.16	21.70

A detailed description of this conversion is given in the SURVEY for 1950 (Appendix B, pages 237-238).

*Manpower, Productivity and Days worked in Hard-coal Mining (Chart 8).*

Data on absenteeism in 1937 were taken from the following sources :

*Belgium* : *Coal Statistics 1929-1946*, Belgium/Luxembourg, European Coal Organization.

*France* : *Statistique de l'industrie minérale et des appareils à vapeur*, 1937.

*Western Germany* : *Zahlen zur Kohlenwirtschaft*, Deutsche Kohlenbergbau-Leitung. (The figure used is an average of the years 1936 and 1938.)

*United Kingdom* : *Colliery Yearbook*.

*Price Indices (text table, page 66)*

National statistical bulletins.

*Cost of Coal as compared with National Income (page 166)*

National statistical bulletins, *Economic Bulletin for Europe*, Vol. 2, No. 2, and SURVEY for 1950.

(b) *Steel (Tables 21, 22, 23, 24, IX and X)*

Besides the sources indicated in the tables, the following should be noted :

*Supplies of Steel-making Materials (Table 23)*

The source for figures of western Germany is *Die Eisen- und Stahlindustrie*, Dusseldorf, except that figures of iron ore production were supplied by the Power and Steel Division, Economic Commission for Europe, and differ from those published, as they refer to deliveries from the mines (i.e., processed ore).

Exports of Swedish ore to Europe and overseas in 1937, 1949 and 1950 were derived from Swedish annual trade statistics. Exports for the first half of 1951 are estimates based on the percentage distribution between countries given in *Ossature métallique*, Brussels, November 1951.

*Production, Trade and Home Supplies of Steel (Tables IX and X)*

Trade figures for steel, taken from national trade statistics, have been multiplied by 1.33 to convert them into crude steel equivalent. This factor represents the average production relationship between crude and finished steel, but may vary a little from one country to another, depending mainly on the product composition of the trade in steel.

The figures thus obtained differ a little from those used in the calculation of index numbers of trade and home supplies of steel in the *Economic Bulletin for Europe*, Vol. 3, No. 2, since the latter were derived from information supplied by Governments, based on a wider definition of finished steel.

The following sources were used for 1951 production in eastern Europe :

*Eastern Germany* : *Tägliche Rundschau*, 2 November 1951; *Die Wirtschaft*, 16 February 1951, 4 May 1951, 3 August 1951 and 26 October 1951.

The figures have been obtained by a comparison of plans and fulfilment, and replace estimates previously made for 1949 and 1950.

*Czechoslovakia* : *Rudé Právo*, 29 April 1951, 29 July 1951 and 3 November 1951, gives percentage increases in the first half of 1951 compared with the same period in 1950 for all metallurgy and a comparison of the third quarters for the steel industry.

(c) *Raw Cotton and Raw Wool (Table 13)*

The following sources have been used :

*Wool Intelligence*, Commonwealth Economic Committee, London, particularly September and November 1951 ; *Cotton Quarterly Statistical Bulletin* and *Monthly Review of the World Cotton Situation*, October 1951, International Cotton Advisory Committee, Washington, D.C.; *Foreign Crops and Markets*, 22 October 1951. Tables 34, 35 and 37 of the SURVEY for 1950 have also been referred to.

One bale of cotton has been taken as equivalent to 216.8 kg., except for the United States (one bale = 220 kg.).

Stock changes in wool are from the end of one crop year to the end of the next. They have been calculated as a difference between production and consumption. The consumption in one crop year has been taken as equal to half the consumption of the first calendar year plus half the consumption of the second calendar year.

(d) *Cotton Yarn, Wool Yarn and Rayon (Table 14)*

All figures have been taken from the *Monthly Bulletin of Statistics*, United Nations.

(e) *Cotton, Wool and Artificial Fibre Cloths (Table 15)*

The apparent consumption (production plus imports less exports) of cotton wool and rayon (including staple fibre) have been added together and the totals have been used as a basis for the index numbers. Production has been taken from the following sources :

*Austria* : *Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung* for cotton and wool, *Statistische Nachrichten* for rayon.

*Belgium* : *Bulletin de Statistique*, *Atlas de graphiques et tableaux statistiques*.

*Denmark* : *Statistisk Aarbog*.

*France* : *Bulletin mensuel de statistique industrielle*.

*Western Germany* : *Wirtschaft und Statistik*. *Die Industrie der Bundesrepublik Deutschland*.

*Italy* : *Bollettino del Comitato Carboni* (wool), *Notiziario della Confederazione generale dell' Industria Italiana* (cotton).

*Netherlands* : *Maandschrift C.B.S.*

*Sweden* : *Industriell Månadsstatistik*.

*Switzerland* : *Quartalsbericht der Paritätischen Kommission der Schweizerischen Baumwollindustrie*.

*United Kingdom* : *Monthly Digest of Statistics*. Use has also been made of the *Cotton Board Trade Letter*.

(f) *Wood-pulp and Paper (Table 16)*

Production figures for 1949 and 1950 and also those for trade have been taken from the *Statistical Yearbook of Forest Products* (Food and Agriculture Organization of the United Nations), 1951. Figures for 1951 are derived from national sources. In certain cases (Belgium, Italy, Norway, and the Netherlands), production of pulp has been partially or totally estimated from

known production of paper and rayon, due account being taken of any trade in pulp. Finally, for Denmark and Switzerland, the figures are estimates.

*Austria : Statistische Nachrichten.*

*Belgium : Bulletin de Statistique.*

*Finland : Tilastokatsauksia.*

*France : Bulletin mensuel de statistique industrielle.*

*Western Germany : Wirtschaft und Statistik.*

*Italy : Bollettino Mensile di Statistica.*

*Netherlands : Maandschrift C.B.S.*

*Norway : Statistiske Meldinger.*

*Sweden : Industriell Månadsstatistik.*

*United Kingdom : Monthly Digest of Statistics.*

Stock changes have not been taken into account. In 1951 the only stocks were those used for work in progress.

#### (g) *Production of Electric Power* (Table VIII)

The data have been supplied by the Power and Steel Division of the Economic Commission for Europe.

### VII. PRICES

#### (a) *Index Numbers* (Tables 49 and XVIII)

Although in principle the index numbers shown cover raw materials, semi-finished products and finished products, whether of domestic or of foreign origin, in many cases finished products are not adequately represented. Furthermore, some of the index numbers probably do not sufficiently reflect fluctuations in the prices of imported materials.

#### (b) *Prices of Principal Raw Materials* (Table 4)

The prices have been taken from the following sources :

*United States : Survey of Current Business, and Monthly Bulletin of Statistics, United Nations.*

*France : Bulletin mensuel de Statistique.*

*Western Germany : Wirtschaft und Statistik.*

*Italy : Bollettino Mensile di Statistica, weekly quotations on the Milan market.*

*United Kingdom : Records and Statistics, supplement to the Economist.* The nine commodities account for a large part of the raw materials consumed in manufacturing industry other than the food industry.

For the calculation of weighting co-efficients, use has been made of publications giving consumption in the year 1950. These sources are mentioned once only below, on the first appropriate occasion, but have often been used for more than one commodity.

#### *Aluminium*

*United States : Year Book of the American Bureau of Metal Statistics.*

*France : Bulletin mensuel de Statistique industrielle.*

*Western Germany : Wirtschaft und Statistik.* As production increased so rapidly in 1951 the figures used are those for estimated consumption in 1951.

*Italy : Metalli non ferrosi e ferroleghie, statistiche 1950.*

*United Kingdom : Monthly Digest of Statistics.*

*Copper : The same sources and also SURVEY for 1950.*

*Lead : United States : Commodity Year-Book 1951—as well as publications mentioned above.*

*Tin : Statistical Bulletin, International Tin Study Group, The Hague.*

*Steel : United States : Survey of Current Business, Quarterly Summary of Foreign Commerce.*

*Wood-pulp* : Sources mentioned above.

*Rubber* : *Rubber Statistical Bulletin*, International Rubber Study Group, London.

*Cotton* : *Cotton Quarterly Statistical Bulletin*, September 1951 op. cit.

*Wool* : *Wool Intelligence*, May 1951 op.cit.

(c) *Prices of Basic Commodities* (Table XXX)

The following sources were used :

*International Financial Statistics*, International Monetary Fund, Washington, D.C.

*Monthly Bulletin of Statistics* : Statistical Office of the United Nations, New York.

*Wirtschaft und Statistik* : Wiesbaden.

*Metal Bulletin*, London.

*Continental Iron and Steel Reports*, The Hague.

*Kommersiella Meddelanden*, Kommerskollegium, Stockholm.

*Survey of Current Business*, Department of Commerce, Washington, D.C.

*Foreign Crops and Markets*, Department of Agriculture, Washington, D.C.

*Bulletin mensuel de statistique*, Paris.

(d) *Prices of Wood and Wood Products* (Table XIX)

In addition to trade statistics, reference was made to the following sources :

*United States* : *Monthly Bulletin of Statistics*, United Nations.

*Austria* : *Monatsberichte des Österreichischen Institutes für Wirtschaftsforschung*.

*France* : *Bulletin mensuel de statistique*.

*Western Germany* : *Wirtschaft und Statistik*.

*Sweden* : *Affärsvärlden* : Auction prices.

(e) *Prices paid to Farmers* (Table 51)

*Belgium* : *Bulletin de Statistique*, Agricultural index 1936/38 = 100.

*Denmark* : *Landbrugsraadets Meddelelser*, index 1909/14 = 100.

*Finland* : *Konjunkturserier*, index 1937/39 = 100.

*Greece* : *Statistical Report*, E.C.A. Mission to Greece, index 1938 = 1.

*Italy* : *Notiziario Istat*, series Agricoltura, index 1948 = 100.

*Netherlands* : *Statistisch Bulletin*, supplement to *Maandschrift C.B.S.*, index 1946/47 = 100.

*Norway* : *Statistiske Meldinger*, index 1938/39 = 100.

*Switzerland* : *Bulletin mensuel de la Banque Nationale Suisse*, index 1948 = 100.

*United Kingdom* : *Monthly Digest of Statistics*, prices for England and Wales, index 1936/38 = 100.

*Cost of Living and Consumers' Prices—Index Numbers* (Tables XVII, 51 and 52)

For most of the countries considered, the index numbers reflect variations in the total outlay on a fixed sample of consumer goods. This sample is generally made up of the amounts of goods (and services) consumed by a working-class family during a



given base period. For this reason, the index numbers do not represent movements in the cost of living for the whole population and do not readily lend themselves to comparisons between one country and another. It is likely that in some cases services are not adequately represented.

The computations of real wages in *Table 52* have been made by comparing the index numbers of wages described below and index numbers of the cost of living used in the preparation of *Table XVII* described above, with the single exception of Sweden, for which the index described as "prices to consumers" has been used.

#### *Retail Prices and Wages in Industry in Terms of Working Time (Table 53)*

Most of the retail prices have been taken from publications of the Central Statistical Office of western Germany : *Statistische Berichte*, Arb. Nr. VI/10/4 and Arb. Nr. VL/10/6, Statistisches Bundesamt, Wiesbaden. Reference has also been made to the *Yearbook of Labour Statistics* (ILO) and to national sources for certain products.

It should be noted that prices are not strictly comparable between countries because of quality differences. Bread prices generally refer to wheat bread, but for Denmark, Finland and Norway, rye bread, and for Austria, western Germany, Sweden and Switzerland, semi-white bread were included. Wide differences exist in the quality of meat, particularly of beef, to which the quotations refer. Lower-quality beef was included in Sweden, Switzerland, Finland, western Germany, and especially in France. The column "Bacon or ham" does not refer to the same product in all countries : it refers to cured bacon in the United Kingdom, smoked bacon in the Netherlands and Switzerland, and ham elsewhere; the French quotation refers to a particularly low quality. The quotation for butter refers to best qualities, but in margarine great variations exist from country to country. For Italy, the price of olive oil was included instead of margarine. Price differentials due to variations in the quality of sugar are less important. The price of coffee is, however, subject to great differences in quality. For Finland, a coffee substitute was included and for the United Kingdom, the price of tea is given instead. For coal, the quality most used for domestic purposes in the particular country was included. It should be noted that the price of potatoes and eggs varies seasonally, but this qualification is less important for the other commodities.

The sources for eastern Europe are as follows :

*Czechoslovakia* : Prices were taken from *Zasobovací Zpravodaj*, 1951, No. 35, and wages from *Rudé Právo*, 1 November 1951.

*Hungary* : Prices were taken from *Economic Statistical Bulletin*, 1949, No. 6; *Szabad Nép*, 1 August 1950 and 2 December 1951 and *Statistical Review*, 1951, No. 3, page 238.

Wages were taken from *Economic Statistical Bulletin* 1949, No. 10; *Statistical Review* 1950, Nos. 1-2 and *Szabad Nép* of 4 June 1950, 1 March 1951, 21 October 1951 and 2 December 1951.

The first two sources give the average monthly wages of industrial workers in March and August 1948, and the average of these two months was assumed to represent the average monthly wage in mid-1948. The second source gives wages in 1948 and 1949, while the third source gives actual wages in December 1949 and April 1950 and various percentage increases for other periods. From this information, average monthly wages were obtained for approximately the same dates as those used for price quotations. Average hourly wages were derived from these by assuming 200 working hours per month.

*Poland* : Prices were taken from *Statistical News*, 1951, No. 2, and wages from *Dziennik Ustaw*, No. 13, which gives the average wage of the fifth group of engineering workers. The 1949 figures are taken from the *SURVEY* for 1949.

### VIII. RETAIL SALES (Tables 15, 54 and XVI)

National statistical bulletins or private organizations which publish cost-of-living index numbers usually show separate series for the principal groups : food, heating and light, rent and clothing. The index numbers for food and clothing have been used to convert the index numbers of retail sales expressed in value terms into index numbers of volume (*Table 54*). In some instances (Austria, western Germany and Norway) an index of food has been combined with an index of stimulants (beer, coffee, etc.). A component of the index of consumers' prices—"household goods"—has been used to convert the index numbers of value and retail sales of the corresponding sector into volume indices in the cases of western Germany and the United Kingdom. The use made of these index numbers is subject to considerable reserve, especially in times of rapidly fluctuating prices, since changes in consumer expenditure on particular commodities are correlated with changes in prices, actual or expected.

*Finland* : *Economic Review*, Kansallis-Osake-Pankki.

*France* : In *Table XVI*, the index of sales of general food stores taken from *Etudes et Conjoncture*, Union Française, November/December has been used. The series for department stores, mainly textiles, could not be used in *Table 15*, since it indicates an increase in sales far too rapid to be accounted for by textiles alone.

*Netherlands* : In *Table 15*, use has been made of the value of textile sales only.

*Norway* : The compilations have been made on the basis of published figures in spite of the lack of comparability between 1949 and 1950.

*Sweden* : The source is *Sociala Meddelanden* for *Tables XVI and 15*. This sample is probably without bias. For *Table 54*, figures concerning private traders, taken from *Konjunkturjournalen*, have been preferred, since this series is consistent.

*United Kingdom* : Quarterly figures of national consumption, *Monthly Digest of Statistics*, at current prices (*Table XVI*) and at 1948 prices (*Tables 15 and 54*). Monthly retail sales : *Board of Trade Journal*.

#### IX. WAGES AND EARNINGS (Tables 51-53)

The data of *Tables 51 and 53* are generally derived from the list of sources published in previous *Bulletins* and *SURVEYS*, to which list must now be added figures privately communicated by the Österreichisches Institut für Wirtschaftsforschung. Also, where possible, the figures were checked in the *Yearbook of Labour Statistics* (ILO). In *Table 52*, index numbers of weekly wages are taken directly from original sources or else derived from the product of an index of hourly wages and an index of working-hours per week. In the absence of the latter information for Denmark, the Netherlands, and Norway, hourly wages had to be used. In Italy, variations in the length of the working-day are small and no account has been taken of them. Throughout, when data were for end of quarters, quarterly averages have been calculated by interpolation, so as to ensure comparability. In general, the sources used for *Table 51* have also been used for *Table 52*, but the following points should be noted :

*Belgium* : Daily wages in manufacturing industry as given in *Revue du Travail*, series continued by the index of hourly wages adjusted to exclude building.

*Denmark* : Hourly wages plus all bonus payments (for overtime, etc.) in industry, commerce and transport.

*Western Germany* : As weekly wages for the whole of industry and for building are separately available, it has been possible to calculate an index excluding building.

*Sweden* : The quarterly inquiries on wages show an index of man-hours worked and an index of workers at work. The index of hourly wages has been adjusted by a calculated index of hours per week so as to obtain an index of weekly wages.

#### X. INTERNATIONAL TRADE

##### 1. THE TRADE OF EIGHTEEN EUROPEAN COUNTRIES AND OF THE UNITED STATES IN CURRENT PRICES

(Tables 1, 3, 29, 30, 37, XXVII)

##### (a) General

The data have been taken from the official foreign trade statistics of European countries. The figures relate, wherever possible, to special trade by countries of origin and of consumption. The import values are on a c.i.f. basis, except in the case of the United States, which gives f.o.b. values; the export values are f.o.b. The import data for the United Kingdom relate to general trade, since the break-down of special imports is not available by countries of origin. For United States exports since 1 July 1950, goods coming under the heading "Special category commodities 1 and 2" are not included, as the break-down by countries of destination is not available. Such goods have also been excluded retroactively to the first half of 1950 as well.

It will be noted that the figures for Germany relate to the trade of the three western zones and West Berlin but that Germany, when considered as a country of origin or destination with respect to other countries, is treated as a single unit. Internal trade between the western and eastern zones of Germany has never been included.

##### (b) Principal adjustments

(i) Trade between the United Kingdom and the Channel Islands, between Denmark and the Faroe Islands and between Norway and Spitzbergen has been considered as internal trade and therefore eliminated. However, since 1 January 1951, Spitzbergen has become part of the Norwegian customs territory.

(ii) Certain unimportant items which cannot reasonably be assigned to any particular region (such as ships' stores and the whale fisheries of the United Kingdom) have been ignored.

(iii) In the break-down of Denmark's trade, the figures have been adjusted to take account of the fact that certain imports recorded as originating in the United Kingdom and the Soviet Union and certain exports recorded as destined for the United States are actually imports from the British and Soviet Zones of Occupation of Germany and exports to the United States Occupation Zone.

(iv) In the monthly trade data for Portugal and Finland, part of the trade is not specified by countries. The geographical distribution given in the annual statistics has been assumed to apply to this unspecified portion. Furthermore, those Finnish exports which constitute reparations are not included.

(v) The value figures for Austrian imports include imports under E.R.P.

(vi) In the case of the Netherlands, the diamond trade, for which no break-down by countries has been available since the end of 1949, is no longer included.

(vii) The figures for United States trade in the third quarter of 1951 relate to general trade, and not to special trade as in the preceding quarters. The difference between total general trade and total special trade is in the neighbourhood of 1 per cent.

#### (c) *Conversion into United States Dollars*

The trade conversion factors used were those given in the *Summary of World Trade Statistics*, Statistical Papers, Series D (Statistical Office of the United Nations). In the case of Italy, Germany (except in 1951) and Greece, the dollar values were taken directly from the official publications.

#### (d) *Grouping of Countries*

A detailed classification of countries is given with Table XXII of the *Economic Bulletin for Europe*, Vol. 3, No. 2.

#### (e) *Conversion of Imports into f.o.b. Values*

In *Tables 1, 3, 29, 30, 37*, c.i.f. import values have been converted to an estimated f.o.b. basis by assuming the difference to be 12.5 per cent in overseas trade, 10 per cent in United Kingdom trade with Europe, and 5 per cent in intra-European trade.

### 2. INDEX NUMBERS OF VOLUME AND UNIT VALUES OF IMPORTS AND EXPORTS—TERMS OF TRADE (Tables 29, 30, 31, 32, 49, XXI, XXII, XXIII)

#### (a) *Volume*

With the following exceptions, the sources, type of index and base year may be found in the *Economic Survey of Europe in 1950*, page 246.

*France*: A new series of indices corrected to take into account variations in the percentage of coverage has been published in the *Bulletin mensuel de Statistique*, November 1951 (INSEE).

*Western Germany*: *Der Aussenhandel der Bundesrepublik Deutschland*, Teil 1, October 1951, gives a new series of volume indices starting from October 1949, with base year 1950 and covering the three western zones. This series has been linked to that published in the last SURVEY.

*Poland*: Trade values have been taken from Table XXII, *Economic Bulletin for Europe*, Vol. 3, No. 2.

#### (b) *Unit Values and Terms of Trade*

With the following exceptions, the sources may be found in the SURVEY for 1950, page 254.

*Finland*: The unit value index published in *Table 30* is the result of dividing the value index by the volume index.

*France*: A new series published in the *Bulletin hebdomadaire de Statistique* No. 188 has been used.

*Western Germany*: *Der Aussenhandel der Bundesrepublik Deutschland*, Teil 1, October 1951, gives a new series of unit values starting from October 1949, with base year 1950 and covering the three western zones. This series has been linked to that published in the last SURVEY.

*United Kingdom*: The unit value index in *Table 30* has current weights (type  $P_1$ ).

For several countries in *Table 30*, the volume index is based on Laspeyres' formula, whilst the price index is based on that of Paasche. If the original base year is unaltered, the product of these two indices should give, for a specified period, the value index. It should be noted, however, that this relation no longer holds once indices are rebased by simple division (as in *Table 30*), since Paasche's formula is not reversible.

(c) *Exports, Imports and Trade Balances of Western European Countries* (Table 29)

The values at January-September 1949 prices have been taken from the following sources, slight adjustments being made to ensure comparability :

1948—*Table 52*—SURVEY for 1949

1949—*Table 4*—SURVEY for 1950

1950 and 1951—*Table 1*—the present SURVEY.

(d) *Exports of Eighteen Western European Countries to European and Overseas Countries* (Table 32)

The volume figures for the United Kingdom and western Germany are taken from sources given in section 4 below, whilst those for total Europe are based on information shown in *Table 1*.

3. QUARTERLY MOVEMENTS IN THE VALUE, VOLUME AND UNIT VALUE OF INTERNATIONAL TRADE (Table 1)

(a) *Value in United States Dollars at Current Prices*

The values of Europe's exports are the same as those described in section 1 above. United States exports exclude "special category commodities" throughout.

For the "Rest of the World", the data on exports are those taken from *Summary of World Trade Statistics*, Statistical Papers, Series D, Statistical Office of the United Nations, to which were added Canadian exports.

World exports have been obtained by adding the three previous items. These figures differ from those shown in the last source indicated above, which includes exports from Poland, Czechoslovakia, and Yugoslavia and also the United States exports of "special category commodities".

(b) *Indices of Volume and Unit Values*

1. *Eighteen Western European Countries*

The fifteen volume indices in Table XXI (with the exclusion of Poland) have been weighted by January-September 1949 trade values. These were combined with current values to obtain unit value indices for fifteen countries, which were then applied to the trade current values of the group of eighteen western European countries to give volume indices of imports from all sources, and exports to all destinations. A special unit value index for exports of this group to countries outside the group was derived, using (i) the volume of exports given by ten major commodity groups described in section 4 below, and (ii) the volume of exports of those countries not included in (i), obtained by applying less detailed unit value indices to exports at current prices.

Having once obtained the volume indices and unit value indices for the exports of the group of eighteen western European countries to destinations outside the group and to all destinations, it was possible to calculate indices for the trade between countries of the group, and hence imports from sources outside the group.

Finally, using the trade values at January-September 1949 prices, indices with base January-September 1950 were established by simple division.

2. *United States*

Exports of "special category commodities" have been excluded, on the assumption that they were subject to the same price movements as total exports.

3. *The "Rest of the World"*

The data have been taken from the *Summary of World Trade Statistics*, op. cit., with the addition of figures for Canada.

4. *The World*

The figures have been obtained by weighting the three previous items.

4. EXPORTS FROM EUROPE, THE UNITED STATES, JAPAN AND INDIA TO EUROPE AND OTHER OVERSEAS COUNTRIES  
BY TEN MAJOR COMMODITY GROUPS (Tables 41, 42, 43, XXV, XXVI)

(a) *General*

In the present state of international trade statistics, it is not possible to make a complete study of the exports of European countries and of the United States, Japan and India by countries of destination and for commodity groups on uniform definitions. It was therefore necessary in certain cases, where no greater detail exists, to use broad commodity groups. Nevertheless, the results obtained may be taken as good indications of the orders of magnitude involved.



The primary interest of the investigation was centred on the exports of manufactured products. The exporting countries considered were the major European exporters of manufactured products as well as the United States and Japan. In the case of India, only the exports of textiles were considered. The countries of destination considered with reference to each exporting country comprise : (a) all the countries of Europe, of which the following are included in eastern Europe : Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, U.S.S.R., Yugoslavia; (b) selected overseas countries. Apart from these selected overseas countries, the item " overseas " is merely to differentiate between exports to total Europe and those to the world.

Unless otherwise stated, all annual data are for the first nine months of each year at annual rates.

Germany has been treated as a whole when considered as a country of destination, but when considering Germany as an exporter, only the trade of the western zones has been taken into account.

British East Africa, when not shown as a whole, has been taken to include : Tanganyika under British Trusteeship, Zanzibar and Pemba, Kenya, Uganda, Nyasaland and Somaliland Protectorate.

#### (b) *Commodity Groups*

The classification is essentially that used in the foreign trade statistics of the United Kingdom, with minor modifications. It has not, of course, been possible to reproduce the same classification exactly in all cases, partly because of the diversity of nomenclature used by different exporting countries and partly because the commodity classifications used for the exports to given countries are often less detailed than those in use for total trade.

The following list gives the composition of each of the ten commodity groups in terms of the British nomenclature :

#### *Commodity Classification*

##### *Group 1. Food, Drink and Tobacco*

Class I : Food, drink and tobacco.

Class IV : Animals not for food.

##### *Group 2. Raw Materials and Articles mainly unmanufactured*

Class II : Raw materials and articles mainly unmanufactured.

Class III A : Coke and manufactured fuel.

Class III P : Oils, fats and resins, manufactured.

Cement (from Class III B).

Newsprint (from Class III R).

##### *Group 3. Metals and Manufactures*

Class III C : Iron and steel and manufactures thereof.

Class III D : Non-ferrous metals and manufactures thereof (excluding partly worked gold, gold leaf, etc.).

Class III E : Cutlery, hardware, implements and instruments (excluding watches).

##### *Group 4. Machinery*

Class III F : Electrical goods and apparatus.

Class III G : Machinery.

##### *Group 5/6. Passenger Cars and Transport Equipment*

Class III S (excluding rubber tyres and tubes).

##### *Group 7. Chemicals and Related Products*

Class III O : Chemicals, drugs, dyes and colours.

##### *Group 8. Textiles and Related Products*

Class III I : Cotton yarns and manufactures.

Class III J : Woollen and worsted yarns and manufactures.

Class III K : Silk and artificial silk yarns and manufactures.

Class III L : Manufactures of other textile materials.

Class III M : Apparel.

##### *Group 9. All other Manufactures*

Class III B : Pottery, glass, abrasives, etc. (excluding cement).

Class III H : Manufactures of wood and timber.

Class III N : Footwear.

Class III Q : Leather and manufactures thereof.

Class III R : Paper, cardboard, etc. (excluding newsprint).

Class III T : Rubber manufactures.

Class III U : Miscellaneous articles.

Watches (from Class III E).

Rubber tyres and tubes (from Class III S).

Group 10. *Unspecified*

Class V : Parcel post.  
Unspecified exports.

Groups 5 and 6 have been combined owing to the difficulty of separating passenger cars from other transport equipment for certain countries. As stated above, total exports are often shown in more detail than those to individual countries. Consequently, the item "overseas countries" being obtained by difference, group 10 (unspecified and parcel post), which is essentially a residual item, is usually understated. In the case of the United Kingdom, where country details by commodity change from year to year, use was made of the 1951 country list for all three years. For Belgium, a considerable value of rolling stock was excluded from Groups 5 and 6 in 1949 exports, as it was found that these goods had been previously imported for repair only.

(c) *Conversion into 1949 Pre-devaluation Prices*

The figures in national currency for 1950 and 1951 thus collected were adjusted to 1949 pre-devaluation prices by use of special price indices computed for each commodity group for each exporting country. The price indices used to translate these figures into 1949 pre-devaluation prices have, in principle, been unit value indices of exports for each commodity group, which were weighted in each year by January-September export values. Where no unit value index numbers were available, wholesale price indices or specially computed unit values for the principal items included in each commodity group were used. In some cases, it was possible to deflate subsections of the broad commodity groups with separate price indices, thus achieving greater accuracy in the deflated totals. For the United Kingdom, for example, the *Board of Trade Journal* gives separate unit value indices for nineteen different commodity sub-groups.

For each exporting country, the detailed price indices were adjusted in order that the change in volume of total exports should agree with the volume indices published in official sources, taking into account all modifications mentioned above. Detailed indices were applied to each of the first three quarters of 1951, and information shown for January-September 1951 is the result of summing these quarters.

5. EXPORTS UNIT VALUES FOR SELECTED TEXTILE PRODUCTS (Tables 47, 48 and XXIV)

The prices shown are average export unit values derived from national trade statistics of the different countries. For western Germany, the 1950 and 1951 data refer to the three western zones; the figures for 1949 relate to the U.K./U.S. zone.

Japanese export prices for 1949 have been roughly estimated on the basis of index numbers published in the *Japanese Economic Survey for 1950-1951* (Economic Stabilization Board of the Japanese Government, August 1951).

For the United States and India, whose trade statistics show exports of cotton cloth measured in square yards and not by weight, use was made of conversion factors derived from United Kingdom trade statistics, which publish quantity figures both in weight and in square yards.

Care has been taken to select as narrowly defined commodity specifications as possible, so as to ensure the greatest comparability from year to year and from country to country. Table B shows the items selected. Nevertheless, the results are not completely comparable.

6. PAYMENTS (Tables 36, 38, Chart 1)

(a) *Balance of Payments of Europe and Other Areas with the United States* (Table 36)

For "special category" exports (apart from deliveries under the military aid programme, which are excluded throughout the table) the individual countries of destination are not published in the United States balance-of-payments estimates, and these exports are given only by broad geographical areas. Consequently, all such exports to Europe, including any that may have gone to the United Kingdom, are treated in this table as exports to "Other European countries".

(b) *Changes in the United Kingdom Current Account, 1950 to 1951* (Table 38)

The column "Estimates of the *Economic Survey of 1951*" has been constructed from estimates and assumptions given or implied in the balance-of-payments and national income sections of this document (Cmd. 8195).

Estimates of the actual changes in the balance of payments on current account for 1951 are based on official balance-of-payments data for the first half of the year, projected to cover the full year with the aid of trade figures for the second half of 1951. This method involves an assumption that the ratio between original trade returns (with imports given on a c.i.f. basis) and the balance-of-payments figures (adjusted for freight on imports, coverage, transfer of ownership, etc.) remains unchanged from the first to the second half of the year.

Table B

COMMODITY NUMBERS AND ITEMS IN TRADE CLASSIFICATION OF DIFFERENT COUNTRIES CORRESPONDING TO COMMODITIES IN TABLES 47, 48 AND XXIV

	United Kingdom	Belgium-Luxembourg	France	Western Germany	Italy	Netherlands	India	Japan	United States
		1949	1950 and 1951		1949 and 1950			1950 1951	
Cotton cloth, grey, unbleached	Woven piece goods, grey, unbleached, other than tyre cord fabrics	527a	527a1 527a2	12-47-11	454	527001	Cotton piece goods, mill made, grey, unbleached	1043 1046 65201	303110 303120 303310 303320 303400 303700 303900
Cotton cloth, white, bleached	Woven piece goods, white, bleached	527b	527b1 527b2	12-47-12	455a	527002	Piece goods, mill made, white, bleached	— —	304000 304210 304610 304800 305110
Cotton cloth, printed	Woven piece goods, printed, other than chintzes	527d	527d	12-93-50	455c	527004	Cotton piece goods, coloured, dyed and printed	1044 { <sup>a</sup> 65202 1045 { <sup>a</sup> 1048 {	304120 304300 304920 305220
Cotton cloth, dyed in the piece	Woven piece goods, other than pile fabrics	527e	527c1 527c2 527c3	12-47-13	455b	527003	—	— —	304110 304220 304910 305210
Cotton cloth, coloured	Woven piece goods, manufactured wholly or in part of dyed yarns and commonly known as coloured cottons other than damasks, tapestries, brocades and the like	527e	527e	12-47-14	456	527005	—	— —	305700 305800 306000 306110
Artificial silk yarn	Artificial silk yarn, single, other than staple fibre or waste	462	462a 462b	12-28-8 12-28-2 12-28-3 12-28-4	394	462002	—	1222 65106	384007 384008 384015
Artificial silk cloth, printed	Other tissues, wholly of artificial silk, printed	—	—	12-93-70	407c2 407c3 <sup>b</sup>	472001 <sup>c</sup>	—	1246 65305	384930 (quantity) 384931 (value)
Artificial silk cloth, dyed	Other tissues, wholly of artificial silk, woven, dyed (including dyed in the yarn)	—	—	12-48-1 12-48-3	—	—	—	— —	384952 (quantity) 384953 (value)

<sup>a</sup> Cotton cloth other than grey.<sup>b</sup> Dyed and printed.<sup>c</sup> Dyed, printed and coloured.

The price and volume components of changes in imports and exports have been estimated roughly with the aid of the quarterly index (of type P<sub>1</sub>) of unit values published in the *Board of Trade Journal*.

In making an estimate for the services transactions, rough adjustment has been made for the loss of income from Persian oil and for the first instalments of interest on the United States and Canadian loans. This estimate is inevitably subject to a large margin of error.

(c) *World Receipts and Payments of Dollars in Transactions with the United States* (Chart 1 - A)

The data have been taken from *Survey of Current Business*, United States Department of Commerce, June 1950 (Table 4) and June 1951 (Table 3). Data for 1951 have been communicated directly by the Balance-of-Payments Division, United States Department of Commerce, and include estimates for the fourth quarter made by the Council of Economic Advisers.

The composition of the three indicators shown in the chart is as follows :

1. *Receipts (gross) from the United States on Goods and Services Account.*

2. *Total Receipts from the United States :*

Gross receipts on goods and services account, *plus* :

Private remittances (net);

Private United States long- and short-term capital, excluding purchases of obligations issued or guaranteed by the International Bank for Reconstruction and Development;

United States Government grants and other unilateral transfers, excluding military aid;

United States Government long- and short-term loans (net).

3. *Total Payments to the United States* (including errors and omissions) :

Total receipts from the United States, *plus* :

Liquidation of foreign gold and dollar assets (net);

Dollar disbursements (net) by the International Monetary Fund and the International Bank for Reconstruction and Development.

(d) *United States Foreign Trade and Industrial Production* (Chart 1 - B)

*Source : Volume of Exports and Imports* : United States Department of Commerce publications.

*Industrial Production* : Federal Reserve Board index of industrial production, unadjusted for seasonal variation, taken from the *Federal Reserve Bulletin*, Board of Governors of the Federal Reserve System, September 1948, 1949 and 1950, November 1951.

(e) *Value, Unit Value and Volume of World Trade* (Chart 1 - C)

*Source : Summary of World Trade Statistics*, Statistical Papers, Series D, Statistical Office of the United Nations.

7. EXPORTS OF TEXTILE PRODUCTS FROM MAJOR EXPORTING COUNTRIES BY MAIN DESTINATIONS (Tables 45 and 46)

(a) *Exports of Cotton Cloth* (Table 45)

*United Kingdom* : *Accounts relating to Trade and Navigation of the United Kingdom*, Class III, Group I. Total of woven piece goods of all kinds.

*Western Germany* : For 1949, *Der Aussenhandel des Vereinigten Wirtschaftsgebietes*, Teil 3, and for 1950 and 1951, *Der Aussenhandel der Bundesrepublik Deutschland*, Teil 3. Item II Ca 4.

*Italy* : *Statistica del Commercio con l'estero*, Table 7, item 49.

*Netherlands* : *Maandstatistiek van de in-, uit- en doorvoer per goederensoort*, items 527001 to 527005.

*United States* : Report F.T. 420, U.S. Department of Commerce, item 350. Cotton manufactures were taken in thousands of current dollars, and deflated to 1949 prices by an average index of unit value (of 102 for 1950 and 132 for 1951) obtained from export price movements of a sample of textile products. All three years were then converted into metric tons per thousand dollars' worth of cotton manufactures. This conversion factor was based on detailed examination of returns for 1949 given in *Summary of Foreign Commerce of the United States, January-December 1949*.



*India* : Accounts relating to the Foreign Sea and Air-borne Trade and Navigation of India, total of mill-made piece goods, taken in thousands of yards and converted into weight at the average rate of 4 yards to 1 lb.

*Japan* : Detailed Import and Export Statistics of Japan, Part B ; for 1950 and first three months of 1951, items 1031 and 1041 to 1048. For second quarter 1951, items 65201 and 65202. For the year 1949, no detailed trade statistics were available, and use was made of Japanese Economic Statistics, January-April 1949, for weights and values, and, other publications giving only values for various other months, estimates were made for the full year.

(b) Exports of Cloth of Artificial Fibre (Table 46)

*United Kingdom* : Accounts relating to Trade and Navigation of the United Kingdom, Class III, group K, artificial silk and manufactures, other tissues—wholly of artificial silk—woven—wholly of staple fibre (including mixtures of staple fibre with artificial silk)—of artificial silk or staple fibre mixed with other materials except silk.

*Western Germany* : For 1949, *Der Aussenhandel des Vereinigten Wirtschaftsgebietes*, and for 1950 and 1951, *Der Aussenhandel der Bundesrepublik Deutschland*, Teil 3, II Ca 1 and 2.

*Italy* : *Statistica del Commercio con l'estero*, Table 7, item 60.

*United States* : Report F.T. 410, United States Department of Commerce, items 384925, 384930, 384952, 384960, 384970. For January-March 1951, the break-down by countries is given only in square yards, but totals are also given in pounds. For the months of April to August, weights were taken in pounds from the above-mentioned report.

*Japan* : Detailed Import and Export Statistics of Japan, Part B ; for 1950, items 1241 to 1249, and for 1951, January to March, 1241, 1246 to 1249; for April to June, item 65305. For 1949, estimates were arrived at by the same methods as were applied for cotton cloth.

XI. CREDIT (Table 56)

The figures were taken from *International Financial Statistics*, I.M.F.

Chapter 5 — Economic Developments in the Soviet Union

1. INDUSTRIAL PRODUCTION BY PRINCIPAL COMMODITIES (Table 58)

For all data already published in the *Economic Survey of Europe in 1950* (Table 12), see Appendix B, pages 228-229 of the 1950 SURVEY.

The 1937 output of other commodities is given in *Tretii pyatiletnii plan razvitiya narodnogo khozyaistva Soyuz S.S.R.*, Moscow 1939, and the 1950 planned outputs from the *Law on the Five-year Plan for the Rehabilitation and Development of the National Economy of the U.S.S.R., 1946-1950*, Moscow, 1946.

1951 provisional output figures are based on statements by Mr. Beria (speech of 6 November 1951, *Izvestia*, 7 November 1951).

*Steam and Water Turbines* : A. Notkin, *Ocherki teorii sotsialisticheskogo vosproizvodstva*, Moscow, 1948, page 282.

*Trucks and Passenger Cars* : E. Lokshin, *Promyshlennost S.S.S.R. v novoi stalinskoi pyatiletke*, Moscow, 1946, page 40, gives the 1940 output. *Avtomobilnaya Promyshlennost* No. 3, 1947, indicates that the plan for 1947 was to be 129 per cent of the 1940 output and 57 per cent over 1946. 1946 and 1947 outputs from the 1947 increase given in the 1947 report on plan fulfilment.

*Synthetic Dyes* : *Khimicheskaya Promyshlennost*, No. 6, 1946, gives 1945 output as 50 per cent of pre-war. 1946-1950 outputs derived from 1945 by applying announced annual increases.

*Soap* : *Pravda*, 11 March 1951 (1950 production was 120 per cent of that in 1940).

*Slate* : *The Law on the Five-year Plan 1946-1950* gives the increase in slate production in 1950 as double 1940 and the increase in capacity during the five-year period as 332 million sheets. 1946-1950 from the published annual percentage increases.

*Sawn Timber* : 1950 output was to be four times that of 1945, *Trudy Instituta Lesa*, Vol. II, 1948, page 43. 1946 and 1947 output increases are given respectively in *Les*, No. 1, 1947, and No. 2, 1948. 1948 from *Pravda*, 5 January 1949.

*Rubber Shoes* : The 1950 target was to be 1.3 times greater than in 1940. (*Law on the Five-year Plan*).

*Vegetable Oil* : *Pravda*, 11 March 1951, indicates that 1950 output was 7 per cent over 1940 (given in *Soviet News*, Soviet Embassy, London, 24 March 1948, as 724,000 tons).

*Fish Catch* : The 1950 target represents 157 per cent of 1940 (*Rybnoe Khozyaistvo* No. 1, 1946).

## 2. GROSS INDUSTRIAL PRODUCTION AT "1926/27 PRICES" (Table 59)

- 1937 : Total value of large-scale industry and its breakdown for production goods and consumption goods from Kolganov, *Narodnyi dokhod S.S.S.R.*, Moscow, 1940, page 30. Other figures from *Tretii pyatiletnii plan razvitiya narodnogo khozyaistva S.S.S.R. 1938-1942*, Moscow, 1939, page 201, the value of "other" industry (included with Republican and local) being estimated on the basis of 1938 and 1939 values.
- 1938 and 1939 : Gross value of output by branches of industry (apparently large-scale only) from *Izvestia*, 15 January 1940. 1939 total output for all industry derived from N. Voznesensky, *Economic Results of the U.S.S.R. in 1940 and the Plan of National Economic Development in 1941*, Moscow 1941, page 8, which states that the output of means of production in industry in 1940 increased by 13.8 per cent as compared with 1939 and by 52 per cent as compared with 1937 and that the output of articles of consumption increased in 1940 by 7 per cent as compared with 1939, the provisional 1940 values being respectively quoted as 83.9 and 53.6 billions of roubles (page 14).
- 1940 : Total output of all industry and subdivision between production and consumption goods from A. Notkin, *Ocherki teorii sotsialisticheskogo vosproizvodstva*, Moscow, 1948, page 224. N. Voznesensky, *Voennaya ekonomika S.S.S.R.*, Moscow, 1947, gives total output of large-scale industry (page 23) and the proportion in the total of the machine-building and metal-working industry (for which Notkin, *loc. cit.*, gives an absolute value) and of the light and food-processing industry (page 80). Value of output in basic industries by application of index numbers of production to earlier value series, that for electric power being adjusted for the division after 1939 of the People's Commissariat for Electric Power and Electrical Engineering.
- 1950 : Basic industries by application of output increases quoted in *Report on the Fulfilment of the Five-year Plan* (17 April 1951), whence also a value increase for the total of all industry and for engineering and metal-working industry.

*Note.* — The data shown for large-scale industry by individual branches for the years 1937, 1938 and 1939 are not directly comparable with the corresponding data covering total industry in 1940, 1950 and 1951 for two reasons (in addition to the fact that the total industry includes small-scale as well as large-scale industry) : (a) the figures for 1940 and later years relate to a larger national territory than those for earlier years ; and (b) it appears probable that some of the data given for "producers' co-operatives" and "local industry" in the break-down for large-scale industry only are allocated more fully by types of production in the figures for 1940 and later years relating to total industry.

## 3. AGRICULTURAL PRODUCTION (Table 61)

- 1937, 1942 (Plan) : *Tretii pyatiletnii plan razvitiya narodnogo khozyaistva Soyuza S.S.R., 1938-1942*, Moscow, 1939. Sources for 1937 livestock data in *Economic Bulletin for Europe*, Vol. 3, No. 2, page 46.
- 1940 : N. Anisimov, *Selskoe khozyaistvo v novoi stalinskoi pyatiletke*, Moscow, 1946, page 53 ; A. Notkin, *Ocherki teorii sotsialisticheskogo vosproizvodstva*, Moscow, 1948, pages 224 and 287 ; *Planovoe Khozyaistvo*, No. 2, 1946, page 127 and *Bolshaya Sovetskaya Entsiklopediya*, Moscow, 1948, pages 901, 912 and 934.
- 1950 (Plan) : *Law on the Fourth Five-year Plan 1946-1950* ; Anisimov, *op. cit.*, page 34, and *Entsiklopediya*, *loc. cit.*
- 1950 : Grain and cotton crop and livestock numbers from *Report on the Fulfilment of the Fourth Five-year Plan* (17 April 1951) and sugar beet crop from speech by Marshal Bulganin (*Izvestia*, 7 November 1950). Sources for sown area data were given in *Economic Bulletin for Europe*, *Second Quarter 1951*, Vol. 3, No. 2, page 45.

## 4. PRICES OF CONSUMPTION GOODS (Tables 66 and XXXV)

The weights used to construct the price index are from the 1928 structure of consumption of urban households in a large number of localities in the U.S.S.R., published in the *International Labour Review*, International Labour Office, November 1933, quoting the Statistical Review of the Central Statistical Office of the U.S.S.R., December 1929. This study analysed consumption by food, clothing, fuel and light, rent and miscellaneous expenditure. The food weight has been raised by three points to allow for the slight redistribution of expenditure on commodities since 1928 indicated by the proportions of 1948 to 1950 retail sales increases. *Izvestia*, 18 January 1950 and 27 January 1951). The residual commodity weight was lowered accordingly and the proportion of expenditure on commodities to the total remains the same as in the 1928 Soviet survey. Subweighting within the food group was adapted from Estonian and Latvian urban household budgets, published in the *International Labour Review*, November 1933 and May 1939, the share of meat and fish being put lower for the U.S.S.R., in view of the high level of consumption of these products in the Baltic States, and the share of vegetables being put higher. Subweighting within miscellaneous expenditures is also from the Baltic States enquiries.

Data on prices of individual commodities are from the following sources : *Monthly Labor Review*, United States Department of Labor, May 1940 and May 1941 ; Baykov, *The Development of the Soviet Economic System*, Cambridge, 1950 ; *Bulletin on Soviet Economic Development*, No. 4, Birmingham, 1950 ; *Izvestia*, 15 December 1947, 10 April 1948, 1 March 1949, 1 March 1950 and 1 March 1951.

For three groups of expenditure—viz. services, rent and fuel and light—no direct price data were available and were estimated as follows: services on the basis of the price of a newspaper; rent on the basis of average earnings (in view of the Soviet practice of fixing rents according to salaries); fuel and light on the basis of the mean of the services and rent indices.

#### 5. PRICES OF INVESTMENT GOODS (Table 68)

The principal data employed in deriving the index are brought together in the following table:

Year	Index numbers of volume of investment (preceding year = 100)	Value of investment at 1945 prices (billion roubles)	Value of investment at current prices (billion roubles)	Index numbers of prices 1940 = 100
	(1)	(2)	(3)	(4)
1940 . . . . .	...	...	43.0	100
1945 . . . . .	...	36.3	36.3	91
1946 . . . . .	117	43	44.2	94
1947 . . . . .	110	47	..	..
1948 . . . . .	123	58	66.2	104
1949 . . . . .	120	70	102.2 <sup>a</sup>	135
1950 . . . . .	123	87	120.1 <sup>a</sup>	127
1951 (provisional)	113	98	124.4	116

<sup>a</sup> Not published, but derived from columns (2) and (4).

The data in column (1) were published in annual reports on plan fulfilment, and column (2) calculated from these by the application of these index numbers to the value of investment in 1945 (quoted in the Budget speech 1946). As the index for 1951 (in column 1) was not available, the percentage increase was taken as the product of the index of investment planned (4 per cent increase) and of the index of the reduction of industrial costs in the third quarter of 1951 over the corresponding quarter of 1950 (9 per cent decrease).

A check on column (2) was made by comparing the aggregate investment 1946–1950 with the total indicated as 305 billion roubles by the 22 per cent overfulfilment (Five-year Plan Results) of the 250.3 billion roubles planned investment. The values obtained by the direct use of each yearly increase were therefore rounded to provide the required 1946–1950 aggregate.

Column (4) was calculated from the 1951 value (indicated by Mr. Beria's statement of 6 November 1951 that investment was 2½ times the 1940 level), whence the dividend of column (3) by column (2) adjusted to 1940 base gives indices for 1945–1948. Indices for 1950 and 1949 were obtained by application of published percentage cost reductions—viz., respectively the third quarter 1951 compared with the corresponding 1950 quarter (9 per cent) and the year 1950 compared with the year 1949 (6 per cent).

The index number for 1937 was separately obtained as the dividend of investment expenditure in current roubles (30.1 billions in 1937, 60 billions planned for 1941) by volume in 1936 prices (29.5 billions in 1937, 57 billions planned for 1941). Data are from Zverev, *Gosudarstvennyye byudzhety Soyuz S.S.R. 1938–1945 gg.*, Moscow, 1946, pages 16 and 105.